



Curriculum Vitae

Alias Abdul Rahman, *PhD*

Professor of 3D GIS

Department of Geoinformatics
Faculty of Geoinformation and Real Estate
Universiti Teknologi Malaysia
81310 Skudai, Johor
alias@utm.my

Curriculum Vitae

1. PERSONAL DETAIL

Name : Alias Abdul Rahman
Date of Birth and Place : 14 January 1962 (Terengganu)
Identification Card No. : 620114-11-5349 (old IC : 6391879)
Nationality : Malaysian
Email : alias@utm.my
URL : www.fksg.utm.my

Home Address : No. 9, Jalan Sejahtera 3,
Taman Desa Skudai,
81300 Skudai, Johor Bahru
Johor.

2. ACADEMIC QUALIFICATIONS

2000 PhD GIS (Glasgow, United Kingdom).
1992 M.Sc Geoinformation (ITC, The Netherlands).
1990 PostGrad. Dipl. Geoinformation (ITC, The Netherlands).
1987 B.Sc. (Hons.) Surveying and Mapping Sciences (NELP, United Kingdom).
1983 Dip. Land Surveying (UTM, Malaysia).

Current Position (s):

- Professor of 3D GIS, UTM
- Chair, for ISPRS Commission II/5 on Multidimensional GIS and Mobile Data Model (from 2008 – 2012): ISPRS – International Society for Photogrammetry and Remote Sensing
- Head of 3D GIS Research Group within K-Economy Research Alliance (RAKE), UTM
- Paper Reviewer for International Journal of Geoinformation Science (IJGIS). Taylor & Francis. (Impact Factor journal)
- Paper Reviewer for Korean Society for Civil Engineering Journal (Indexed and Impact Factor journal)
- Paper Reviewer for African Journal of Business Management (Index and Impact Factor journal)
- Paper Reviewer for Journal of Computers and Urban Environment, Elsevier (Indexed and Impact Factor journal)
- Paper Reviewer for Sensor Journal (online journal)
- Deputy Dean (Research and Postgraduate Studies), UTM

2011 • Nominee for Who's Who in the World (for 2012 Edition)

3. TEACHING

At Foreign Universities (Postgraduate)

2007 **Stuttgart University of Applied Sciences (SUAS), Germany**
Programme: MSc in Photogrammetry and Geoinformatics
Subject: 2D and 3D Spatial Data Modelling
Visiting Professor at SUAS.

At UTM (Postgraduate)

2011 Introduction to 3D GIS (MGG 1674)

2010 GIS – theory and practice (MGG 1014)
GIS Research Methodology (MGG 1073)

2009 Principle of GIS (MGG 1014)
GIS Research Methodology (MGG 1074)

2008 Principles of GIS (MGG 1014)
GIS Research Methodology (MGG 1074)

At UTM (Undergraduate)

2010 DTM for GIS (SGG 4623)

2009 DTM for GIS (SGG 4623)

2008 Programming III (SGG 3463)
DTM for GIS (SGG 4623)

2007 DTM for GIS (SGG 4623)
Programming III (3 SGG)

2006 Programming III (3SGG 3463)

2006 Web GIS (4SGG)
DTM for GIS (4SGG)
Programming II (2SGG)
Programming III (3SGG)

2005 Programming II (2SGG)
Programming III (3SGG)

- 2004 Web GIS (4SGG)
Computer Graphics (2SGG)
Software Engineering (2SGG)
Programming II (2SGG)
Programming III (3SGG)
- 2003 Computer Programming II (Object-oriented using C++), SGG 2483
DTM for GIS (4SGG)
Web GIS (4SGG)
- 2002 Software Engineering (SGG 3213)
Web-based GIS (SGG 4583)
Object-Oriented Programming using C++ (SGG 2503 / SGG 1363)
Digital Terrain Modelling for GIS (optional) (SGG 4053)
- 2001 Visualization (SGG 4523)
Advance GIS (SGU 4453) – adjunct lecturer: Introduction to 3D GIS.
Web-based GIS (SGG 4583)
- 1996 Data Model and Data Structure (SUG 3093)
- 1995 Digital Mapping (SUT 5613)
Data Model and Data Structure (SUG 3093)
Computer Graphics (SUT 5613) (Lab.)
Surveying for quantity Survey (DUP 2043) (field work demonstrator).
- 1994 Digital Mapping (SUT 5613)
Digital Mapping (Lab.)
Computer Graphics (SUT 4833)
Surveying and Mapping (IDS 0223) (field work demonstrator).
- 1993 Digital Mapping (SUT 5613)
Digital Mapping (Lab.)
Cartography (DUT 1043)
Cartography (Lab)
Engineering Survey for Civil Engineering (field work demonstrator).
- 1992 Cartography II (DUT 3543)
Cartography II (DUT 3543)
Surveying and Mapping (DPB 0222)
- 1989 Surveying and Cartography II for Valuers (SPH 1543)
- 1988 Cartography II (DUT 3543)
Cartography II (DUT 3543) (Lab.)
Surveying for Architecture (ISB 1912)
Surveying for Architecture (ISB 1912, field work)

- 1987 Cartography II (DUT 3543)
 Cartography II (Lab.)
 Surveying for Architecture (ISB 1912)
 Surveying for Architecture (ISB 1912, field work)
- 1984 Engineering Survey for Civil Engineering (2 DKA and 2 SKA) (field work demonstrator)

Post Doctoral Supervision

- Dr Ismail Rakip Karas. 3D navigation for indoor environment (June – September, 2010).

Foreign University Students Internship Supervision (MSc/PhD)

- Manju Munankarmi (2010). 3D city modeling (from Stuttgart University of Applied Sciences, Germany) – MSc program
- Ghita Lahlou (2010). 3D GIS for energy management for buildings (from Morocco) – Diplom. program
- Abdul Salamoo (2010). GIS for landslides risk analysis (from Mehrat University of Engineering and Technology, Sindh, Pakistan) – PhD program
- Denis Holder (2010). 3D city modeling (from Stuttgart University of Applied Sciences, Germany) – MSc program
- Andreas Lauer (2010). 3D city modeling (from Stuttgart University of Applied Sciences, Germany) – MSc program
- Ahmad Fikri b. Abdullah. "3D GIS based hydrologic water modeling". UNESCO-IHE Delft, The Netherlands. Co-supervised with Prof Dimitri Solomatine and Dr Zoran Ivanmovich – PhD program

PhD Supervision

- 2011
- Muhamad Uznir b. Ujang: 3D spatial data modeling for disaster management
 - Manju Munankarmi. TBI
- 2010
- Bernerd Siew. "Compression technique for small display device".
 - Siddique Ullah Baig. "2D and 3D spatial objects generalization".

- Behnam Alizadehashrafi. "Enhancing technique of images for 3D building facades within mobile navigator".
- Nalani H. A. "Airborne and mobile laser scanning data integration for 3D GIS".
- Khairul Hafiz b Sharkawi. "3D building detection using segmentation technique".
- Edward Eric Duncan. "Unified Data Model for 3D GIS".
- 2008 • Tan Liat Choon. "Legal Aspect of 3D Cadastre".
- 2007 • Shajaa Al-Afifi. "GIS for urban planning – case study UAE." (full-time)
- 2006 • Mohd Izham Yusoff. "GIS-based Hydrological runoff surface modeling".
- 2005 • Ivin Amri b. Musliman: "3D navigation for 3D GIS" (full-time)
Co-supervisor – Prof Dr Volker Coors (Stuttgart University of Applied Sciences, Germany)
- Muhammad Imzan b. Hassan: "Development of Malaysian 3D cadastre" (full-time)
Co-supervisor – Assoc Prof Dr Jantien Stoter (ITC, The Netherlands)
- Muhamad Harith b. Khalid: "Managing 3D spatial data for large area" (full-time)
- 2004 • Chen Tet Khuan : "3D spatial operators for 3D GIS" (full-time)
Co-supervisor – Prof Dr Sisi Zlatanova (TU Delft, The Netherlands)
- 2003 • Georg Held : "Web 3D GIS" (full-time)
Co-supervisor – Prof Dr Sisi Zlatanova (TU Delft, The Netherlands)

Foreign University Thesis Examiner

- 2010 • Ahmet Senglu: Object extraction from high resolution aerial images for city modeling. Istanbul Technical University (ITU), Turkey (MSc external examiner)
- 2008 • Yousef Sadjadi: "Terrestrial Photogrammetry for 3D GIS". University of Glasgow, Scotland, UK (PhD external examiner)
- 2006 • Chong S. C.: Towards 3D Cadastre in Malaysia. Delft University of Technology (TU Delft), The Netherlands (MSc external examiner)

PhD Examiner

- 2011 • Babikir Ahmed Mobarak Ahmed: Radar Shape-from-shading-algorithm for the extraction of 3D heights from single SAR image (external examiner for UPM)
- 2006 • Deni Suwardhi : “Cranio facial database development”
- 2000 • Surya Afnarius : “ Rekabentuk dan Pelaksanaan *Oil Spill Response Information System*”.

PhD Examination Chairman

- 2011 • Mohamad Khairul Nizam: Image processing for industrial applications
- 2007 • Khalifa Thani Mohamed Romathi: “Study on the Development of Spatial Data Management Centre in Abu Dhabi for the implementation of NSDI for UEA”.

PhD Proposal examiner

- 2008 • Sulaiman Al Mohammed. “SDI for United Arab Emerates”.
- 2006 • Mohamad Ghazali Hashim. “Object-Oriented GIS for Local Authority.
- Ayoub Al-Hameed: “Water management using GIS and Remote Sensing”
- 2005 • Deni Suwardhi. “An information system to support a nation wide database for normal and malformation craniofacial”. April, 2005

MSc. Supervision:

- 2011 • Hojjat Saadi: Trees modeling for 3D city model
- Mahsa Laghliat: CityGML
- 2010 • Abdul Lateef Bologlu: 3D visualization for underground pipelines
- 2006 • Siti Nur Awanis bt Mohamad Zulkifli: “Managing 3D spatial objects using geo DBMS and Microstation”.
- Muhamad Hasif Nasruddin: 3D registration for 3D objects in cadastre
- Mohd Uznir Ujang: Development of 3D network analysis by using Dijkstra algorithm.
- Mohd Hafiz Sharkawi: 3D navigation based on computer game engine
- Low Tsuey Miin: Developing 3D object reconstruction system from LIDAR data.

- 2004 • Eu Yen Ching: "VRML and Oracle"
- 2004 • Zie Zie Yantie : "3D system for craniofacial database"
- Wan Deraman b. Wan Zakaria: "Framework for 3D strata plan submission".
- 2003 • Intan Sajidah bt Abd Aziz: "Development of database for craniofacial objects". Co-supervisor: Prof Halim Setan
- 2002 • Abdul Razak b. Zainal Abidin: "Slope mapping analysis".
- 2001 • Chan Wai Seen : "The Effects of infrastructure development using GIS: a case study in Lembah Kelang and Selangor".
- 2001 • Chen Tet Khuan: The development of the 3D buffering tools for GIS: an extension to ArcView 3D Analyst".

M. Sc Thesis Examiner (External)

- 2008 • Muhammed Mustapha AlHabshi : "Wireless Geocoding for Road Accidents Data Collection Using Location based Services". (Universiti Putra Malaysia)
- Seyed Ali Zamani: "Traffic Volume Prediction Utilizing Feed Forward-Backpropagation and Its Comparison with ARIMA Time Series Method". (Universiti Putra Malaysia)

M. Sc Thesis Examiner (Internal)

- 2008 • Diana bt Muhamad: "Accuracy of Digital Elevation Model Derived From Non-Metric Images for Mass Soil Movement Detection"
- 2006 • Satria Ghandini b. Ameruddin: "GIS software interface"
- 2005 • Sa'adiah bt. Mohd Saat: "Permodelan Lubang Benam Menggunakan Teknik GIS di Kawasan Kediaman".
- 2005 • Teh Hock Heng: "The development of PDA Personal Navigation System".
- Satria Ghandini b. Amerudin. "DSS Kawalan pembangunan dikawasan tanah tinggi dan lereng bukit".
- Diana bt. Muhamad. "Analysis on the application of DEM derived from non-metric images for mass soil movement detection".

- 2004 • Ismail Ma'arof: "Pemodalan Tiga Dimensi Menggunakan Sistem Fotogrametri Kos Rendah".
- 2004 • Mohd. Sharuddin Ibrahim: "Pengukuran dan Pemodalan Tiga Dimensi (3D) Berkejituan Tinggi Menggunakan V.I.S.T.A".
- 2003 • Kamarrul Azahari b. Razak: "Aplikasi Teknik Penentududukan Sejagat (GPS) dan Sistem Maklumat Geografi (GIS) dalam pemantauan Tanah Runtuh", (for MSc degree).
- 2000 • Mohd. Redza Yosoff: "Pembangunan Sistem Pengkalan Data Pengetahuan 'Land Cover Spectual Signature' Tumbuhan dan Tanaman: Kawasan Kajian di Daerah Mersing-Kluang" (for M. Sc degree).
- 2001 • Azrin bt. Reli : "Pembentukan Sistem Pengurusan Banjir dengan Teknik GIS dan Remote Sensing : Kes Kajian di Kawasan Kulak Terengganu" (for M. Sc degree).
- Hamidah bt. Mamat : "Pembangunan Model Sistem CAMA BerasaskanGIS : Kajian Kes – Majlis Dearah Kulai'. (for Msc degree)
- Ismail Ma'arof : "Visualisasi dan Penghasilan Model 3D Menggunakan Kaedah Fotogrametri Digital Jarak Dekat" (for MSc degree).
- 2003 • Mohd. Shharuddin bin Ibrahim : Pemodelan Tiga Dimensi (3D) Berkejituan Tinggi menggunakan Sistem Fotogrametri Digital Jarak Dekat (for MSc degree)
- 2003 • Puteri Suhaiza bte Sulaiman : "Lorekan Rupa Bumi 3 Dimensi Secara Artistik dalam Masa Nyata" (for M.Sc degree, Science Computer)
- 2003 • Agnes Tan @ Tan Chin San : "Analisis Spatial Kelip-Jelip Di Daerah Kuala Selangor" (for M.Sc degree, Geoinformatik).
- 2002 • Oliver Valentine Eboy : "Pengintegrasian GIS dan MRA untuk menghasilkan system CAMA" (for M.Sc degree).

Undergraduate Supervision

- 2011 • Mastura Zulkifli: Spatial database for underground utility objects
- Mohamad Affendi: Trees modeling based for 3D city model
- Ting Long Chew: Building modeling based on LoD3
- 2010 • Chan Zi Yan: 3D modeling for trees and vegetation.

- Wei Leik: Level of Details 4 (LoD4) city modeling
- Ai Lee: Level of Details 3 (LoD3) city modelling
- 2008 • Chong. "3D utility database.
- Lee. "Indoor positioning"
- Bernerd. "GPS and 3D data matching computer program"
- 2007 • Nor Suhaibah Azri. "Managing 3D spatial objects using Oracle spatial and Autodesk 3D Map"
- I'li Aainaa Yaakop. "Database development for cadastre registration purposes.
- Adriana Christopher Tegong. "3D indoor navigation for PSZ UTM"
- Sulwana Abdullah. "Pembangunan perisian bagi interpolasi"
- Mohd Kepli Suliman. "Exploring ArcScene software"
- Mohd Farid Mazlan. "3D navaigation using 3D game engine"
- Salina "Pembangunan Perisian Kontur berdasarkan data berstruktur TIN dengan menggunakan Visual Basic"
- Ng Pei Woon: "High fidelity DTM generation and 3D spatial objects reconstruction"
- 2006 • Azrul Ridzwan b. Shamsul Bahri. "3D objects generation using OpenGL"
- Mohd Naim b. Samad. "Pembentukan objek 3D dengan menggunakan Map 3D"
- Mohd Nurul Fakhri b. Adan. "Penggunaan Sketch Up dan ArcView"
- Mohd Shahrir b. Yaziz. "Pembanguna antaramuka bagi perisian DTM"
- Rd. Puteri Khairani bt. Khirotdin. "Pembangunan Web GIS"
- 2005 • Maria Elmar Ramly. "Pembangunan mobile GIS untuk pengutipan data lanskap (sistem GIS L-CAPE ver. 1.0)".
- Norzilawati Abdullah. "Pengekodan DTM mengginakan bahasa VRML"

- Al-Fatihah bt Mat Razi. "Pengekodan bagi pemaparan DTM menggunakan bahasa X3D"
 - Halauyah bt Hashim. "Kajian ketepatan penjanaaan model rupabumi berdigit (DTM) dengan menggunakan sistem fotogrametri digital DVP"
 - Ahmad Tarmizi b. Abdul Halim. "Papararan object 3D dan Oracle Spatial"
 - Mohd Faizal Ezani b. Sulaiman. "Kajian algoritma Dijkstra"
 - Mohd Irwab b. Mohd Zulkifli. "Pembangunan perisian pemprosesan data bentuk mukabumi digital (DTM) menggunakan perisian Microsoft Visual Basic 6.0"
 - Bernerd Bondly. "Pembangunan antaramuka DTM berasaskan TIN"
 - Mohd Hasliman b. Ab Rahman. "Object 3D dan pengakalan data Oracle Spatial"
 - Burhanudin Laoding. "Pembangunan aplikasi Web based GIS bagi pihak berkuasa tempatan Pasir Gudang"
- 2004
- Mohd Farhan b. Ibrahim. "Rekabentuk Model Konseptual untuk Pihak Bomba dan penyelamat".
 - Mohd Zakri b. Tarmidi. "Kajian Awal Konsep Pembangunan Antaramuka Pengguna bagi Sistem Perkhidmatan Berasaskan Lokasi (LBS) – gunapakai GeoMedia IntelliWhere bagi Perkhidmatan Pra-hospital".
 - Loh Guan Hong. "3D Building Reconstruction from LIDAR Data".
 - Ooi Teik Mun. "The conceptual design for pre-hospital location-based services GIS application using Intergraph IntelliWhere LocationServer."
 - Siti Nur Awanis bt. Mohd Zulkifli. "Pengkodan objek spatial 3D dengan menggunakan X3D."
 - Dhiya bt. Marzuki. "Oracle Spatial query-enable 3D Visualization."
 - Surina bt. Adeni. "Penjanaaan DTM Menggunakan Data Kontur dan LIDAR: Kajian Ketepatan".
 - Farizah bt. Ismail. "Kajian Ketepatan : Peta Topografi Digital dan Ortofoto digital."
- 2003
- Low Tsuey Miin (4 SGG). "Penggunaan ArcIMS untuk e-Commerce".
 - Izran Sarrazin Mohammad (4 SGG). "High Fidelity Digital Terrain Modelling for Skudai Area".

- Beh Boon Heng (4 SGG). "Generating Online Map for Skudai Area using Minnesota MapServer".
 - Nesamalar a/l Krishnan (4 SGG). " a Comparison of Online Map Generation between ArcIMS and JShape Free Map Server".
 - Christine Anak Asun (4 SGG). " Using Free Map Server (JShape) for GIS Application on Interactive Display for Spatial and non Spatial Information for Skudai Area'.
- 2001
- Siti Rodziah Mastor (4 Sarjana Muda Sains (Matematik)), " Analisis Data Kemagnetan Dengan Menggunakan Teknik TIN" (adjunct supervisor).
- 1995
- Saifuldin Muhammad (5 SUT), "Pemelotan Tunggal Fotogrametri Dalam Perisian MicroStation".
 - Rosli b. Pin (5 SUT), "Teknik Perbezaan Model Rupabumi Berdigit Untuk Mengesan Pergerakan Tanah".
 - Norazlian Abidin b. Kamaruddin (5 SUT), " Pembuatan dan Pengeluaran Peta Berdigit Menggunakan Perisian PC MicroStation'.
 - Zainal Abidin b. Kamaruddin (5 SUT), "Penubuhan Pangkalan Data Topografi Berdigit Bagi Kawasan Kampus UTM Skudai".
 - Azharuddin b. Abu Hassan (5 SUT), "Visualisasi Topografi: Penilaian Perisian MicroStation versi 5.0".
 - Zulkefli b. Majid (5 SUT), " Rekabentuk Peta Tematik Dengan Perisian CorelDraw".
 - Kamarul Ariffin b. Kamaruzzaman (5 SUT), "Pembentukan Pengkalan Data GIS Untuk Pengurusan Laluan Paip Gas Petronas".
 - Abdul Aziz b. Harun (5 SKA), " Pengurusan Saliran Dengan Menggunakan GIS : Kajian Kes Sistem Saliran Daerah Johor Bahru". (2nd. supervisor)
 - Raman a/l Supramaniam (5 SUT), " Penjanaan Model Rupabumi Berdigit (DTA) Fideliti Tinggi".
 - Luta a/k Buli (5 SUT), " Penggunaan Modul Network Untuk Analisis Spatial Pulau Langkawi".
- 1994
- Tan Lye Siang (5 SUT), "DTM : Visualisasi dalam Sistem Maklumat Geografi (GIS)".
 - Mohd. Zahran Saad (5 SUT), " Analisis Spatial Untuk Pulau Langkawi :

Gabungan Data Garis Kontur dan GPS”.

- 1989 • Survey Camp (3 SUT), Kuantan, Pahang.
- 1988 • Mohd. Musa Selamat (5 SUT), “Penghasilan Peta Foto”.
- Mohd. Khairul Said (5 SUT), “Keberkesanan Komunikasi Kartografi Serta Hubungannya dengan Rekabentuk Peta”.
- Marzuki Abdul Manaf (5 SUT), “Penghasilan Peta Topografi Dengan Menggunakan Perisian Kern Maps 300”.
- Zulkafli b. Zakaria (5 SUT), “Pengunaan Warna Berdasarkan Carta Warna Serta Tahap Bezanampak (contrast) Minima di antara Sesuatu Warna bagi Pemetaan Choropleth dan Isoline”.
- Hamzah b. Zain (5 SUT), “Kajian ke atas Pengguna Peta di Malaysia”.
- Loh Sow Kam (5 SUT), “ Penukaran Vektor ke Raster”.
- 1987 • Wong Tiong Seng (2 SUT), “Sistem Automasi dalam Kartograf : Perkembangan dan Keupayaannya”.

Undergraduate (Thesis Evaluation and Assessment)

- 2006 • Norhafizah bt Mohd Nor (4SGG). Taksiran Keperluan GIS bagi Pembangunan Enterprise GIS bagi Pihak Berkuasa Tempatan Pasir Gudang.
- Haslinda Chan (4SGG). Pembangunan Model Perorganisasian Enterprise GIS untuk Pihak Berkuasa Tempatan Pasir Gudang.
- Noriha bt. Mohamed (4SGG). Aplikasi GIS dalam Menganalisa Jenayah Penagih Dadah.
- Salbiah bt Mad Sahad (4SGG). Pembinaan Laman Web Akuakultur berasaskan GIS untuk Jabatan Perikanan Negeri Johor.
- Rohazaini bt Muhammad Jamil (4SGG). Permodelan Pencemaran Air Tanah berdasarkan Taburan Telaga di Kelantan menggunakan Analisis GIS.
- Faizatul Khadijah bt Sidek (4SGG). Penggunaan Alat Penerima Trimble’s GPS Pathfinder Pocket dan Perisian TerraSync untuk Kutipan Data Spatial.
- Zulkhairi b. Omar (4SGG). Kajian Penentuan Bilangan Titik Kawalan Optimum bagi Penghasilan Imej Ortorektifikasi QuickBird.

- Nik Norasma bt Che' Ya (4SGG). Penentuan Kesesuaian Tapak Ternakan Ikan Air Tawar dengan menggunakan GIS (Kajian Kes: Johor Bahru).
- Wan Nurfadilah bt. Abdul Rahman (4SGG). Aplikasi GIS dalam Pengurusan Penanaman Kelapa Sawit di Plot Percubaan Unit BiakBaka Felda.
- 2004 • Lee Chuong Juen (4SGG). GIS in Correlation Analysis of Land Development and Demography.
- 2003 • Lim Kaideen (4 SGG), Pengaturcaraan Komputer bagi Penukaran Koordinat WGS84 ke Koordinat Tempatan Menggunakan Avenue.
- Mohd. Uswadi Abd. Rahim (4 SGG), Aplikasi Pembangunan Model 3D (Tekstur Sebenar) Sebagai Input untuk Pengkalan Data GIS.
- Phang Sound Ley (4 SGG), Permodalan Jaraingan Geometri dan Peraturan sambungan dengan menggunakan Geodatabase.
- Umi Salamah Mohd. Saat (4 SGG), Pengenalpastian Perubahan Kawasan Dalam Fotoudara dengan Menggunakan perisian Helava (kawasan kajian : UTM).
- Yeo Hwee Ming (4 SGG), Intergation of ArcGIS and Oracle using ArcSDE.
- Nik Adib Nik Din (4 SGG), Aplikasi GIS dalam Pengurusan Tanaman dan Sawah Padi Lembaga Kemajuan Pertanian Kemubu (KADA) – Kes Kajian : Rancangan Pengairan Kemubu.
- 2002 • Indrimita Sari bte. Dahmir (4 SGG), "Rekabentuk & Pembangunan Sistem Maklumat Jalanraya".
- Intan Sajidah Abd. Azizi (4SGG), "Pembangunan Model Data Sungai dengan Konsep Berorientasikan Objek'.
- Ahmad Rizuan Abdullah (4 SGG), "Pembangunan Pangkalan Data Gis Rancangan Struktur Negeri Kajian Kes : Johor Darul Takzim".
- Chong Kui Hiong(4 SGG), "Penggunaan Laman Web Kartografi Tematik Secara Interaktif dan Dinamik".
- 2001 • Mohd. Faizal Mohd Afandi (4 SGG), "Animasi GIS sebagai Sokongan kepada Perancangan Pembangunan Kawasan Berbukit".
- Mohd. Hazley Halim (4 SGG), "Pengutipan Dta Fotogrametri Berdigit untuk GIS".
- Indrimita Sari bte. Dahmir (4 SGG), "Rekabentuk & Pembangunan Sistem Maklumat Jalanraya Kebangsaan".

- Intan Sajidah Abd. Aziz (4 SGG), "Pembangunan Model Data Sungai Dengan Konsep Berorientasikan Objek".
 - Yap Won Fui (4 SGG), "Mnipulasi Data Ketinggian : Kesan Penjanaan Garis Kontur Baru".
 - Nurazba Syawani Azmi (4 SGG), "Analisis Pengurusan Lalulintas Menggunakan GIS di sekitar Bandar Alor Setar".
 - Lee Kim Haw (4 SGG), " Kajian Perwakilan Berbilang untuk Aplikasi : Sistem Maklumat Pelancongan Dengan Menggunakan OOGIS".
 - Erni Yusniza Mat Sani (4 SGG), "Pengintegrasian data ketinggian bangunan dan data permukaan bumi bagi aplikasi tadahan pandangan (viewshade analysis)".
 - Rowena Mat Halip (4 SGG), "Pembangunan sistem maklumat landskap berkonsepkan multimedia".
 - Mohd. Hazrin bin Hashim (4 SGG), "Penentuan tapak cadangan Bandar baru dengan menggunakan teknik analisis potensi permukaan (kajian kes : Hulu Selangor)".
 - Adihaslinah Abdul Kadir (4 SGG), "Aplikasi GIS dalam penawaran dan permintaan kemudahan awam (sekolah) di Bandar Johor Bahru."
 - Rosminah Ahmad Ihsan (4 SGG), "Pembangunan carta digital menggunakan GIS untuk pengurusan marin (kawasan kajian: Pelabuhan Johor)".
 - Zulhimi Shoheh (4SGG), "Aplikasi GIS untuk pengurusan dan perancangan pencegahan kebakaran (kes kajian : Taman Universiti, Skudai)".
 - Mohd. Helmi Haji Daud (4 SGG), "Analisis ketepatan peta digital berbanding kaedah ukur lapangan".
- 1995
- Bakeri b. Mamat (5 SUT), "Penggunaan GIS dalam Menganalisis Kemasukan Pelajar Ukur Tanah di Institusi Pengajian Tinggi Malaysia".
 - Azarudin Zahari (5 SUT), "Kajian Kemasukan Data Topografi ke Pangkalan Data Sistem Maklumat Geografi dari Kaedah Pengimbasan".
- 1994
- Look Terk Siang (5 SUT), "Rekabentuk Antaramuka Pengguna GIS untuk Majlis Daerah Kluang Utara".
 - Low Eng Peng (5 SUT), "Pengurusan Bekalan Tenaga Elektrik dengan GIS : Satu Kes Kajian".
 - Thiagu a/l Muniandy (5 SUT), "Penggunaan GIS bagi Tujuan Pengoptimaan Laluan".

- Yuzairi Mohd. Yusoff (5 SUT), “Penilaian Harta Tanah Menggunakan GIS: Kes Kajian Majlis Daerah Kluang Utara”.

4. RESEARCH

International

- 2004 • Malaysian case study for Intergraph’s IntelliWhere software. Grant (in the form of 5 licenses worth of Euro 50,000) received from Intergraph Inc., Netherlands
- 2000 • 3D Data Model for Loch Lommond and Trossachs Lakes (Principal Researcher: Dr Jane Drummond, Research Assistant: Alias Abdul Rahman). Joint Research Project between Glasgow University, East of Scotland Water and Loch Lommond Park Authority.

National

- 2010 • 3D City Modelling for Putrajaya. Grant received from Malaysian Centre for Geospatial Data Infrastructure (MaCGDI) (RM235,000)
- 2008 • WPI 3D geoportal. Grant from Universiti Teknologi Malaysia (RM50,000).
- 2007 • 3D navigation system for virtual environment based on 3D game engine (MOSTI eScience Fund) – RM250,000
- 3D spatial data management for large area (MOSTI eScience Fund) – RM250,000
- Framework for 3D cadastre (MOSTI eScience Fund) – RM150,000
- 3D navigation for 3D GIS (MOSTI eScience Fund) – RM250,000
- 3D network analysis for disaster management (MOSTI eScience Fund) – RM200,000
- Developing ubiquitous mobile geospatial data acquisition system for terrain spatial objects (eScience Fund) – pending at MOSTI
- Developing next generation of 3D spatial operations (eScience Fund) – pending at MOSTI

- Developing 3D utility spatial information system (eScience Fund) – pending at MOSTI
- Sets and Euler theories for new spatial data modeling of hybrid spatial objects (MOHE Fundamental Research Grant Scheme, FRGS) – RM50,000
- 2004 • Conceptual Modelling of 3D visualization for 3D Spatial Objects (UTM RMC grant # 75075).
- 2003 • Developing Three-Dimensional Topological Model for 3D GIS (IRPA grant # 74152).
- 2001 • Soil Erosion and Landslide Study for Pergau Catchment Area (contract research with TNB Research Sdn. Bhd.
- 1991 • The Effectiveness of Replastering The Sultan Ismail Bridge, Muar Johor (Principal Researcher ; Assoc Prof Azmi Hassan, researcher : Alias Abdul Rahman). Research report submitted to Research and Consultancy Unit, UTM, 1991.
- 1995 • Spatial Analysis for Langkawi Island, VOT 61650 (Principal Researcher : Alias Abdul Rahman, co-researchers : Zulkarnaini Mat Amin, and Alias Abdul Rahman).
- 1995 • Computer Assisted Map Design, VOT 61665 (Principal Researcher : Assoc. Prof. Mohd. Said Mat Lela, co-researcher : Assoc. Prof. Ghazali Desa and Alias Abdul Rahman).
- 1996 • Data Structuring for DTM and GIS Integration (Principal Researcher : Alias Abdul Rahman, co-researcher : Assoc. Prof. Dr. Taher Buyong, Assoc. Prof. Ghazali Desa and Mohd. Ghazali Hashim).

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- 2006 • ABDUL-RAHMAN, A., S. ZLATANOVA, and V. COORS (Eds.) Innovations in 3D Geoinformation. Springer-Verlag, Germany, 760 p.

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- ABDUL-RAHMAN, A., M. U. UJANG, and M. I. YUSOF (2008). 3D dynamic visualization and flood modeling. In: (ed.) J. Lee., Springer-Verlag
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- 2005 • HELD, G., ABDUL-RAHMAN, A., and ZLATANOVA, S. (2005). Web 3D GIS for Urban Environments. *Malaysian Surveyor*, Vol. 40. No. 2, ISM Publication.
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- 2005 • ABDUL-RAHMAN, A., J. STOTER, and A.F. NORDIN (2005). Towards 3D Cadaster in Malaysia. Proceedings of International Symposium and Exhibition on Geoinformation (ISG) 2005, Penang, Malaysia
- 2005 • CHEN, T.K. and ABDUL-RAHMAN, A. (2005). 3D Buffering: a visualization tool for Disaster Management. Int. Conference on Disaster Management (G4DM), Delft, The Netherlands, March.
- 2004 • HELD, G., A. ABDUL RAHMAN, and S. ZLATANOVA (2004). 3D Geoinformation system within Web environment. *International Conference on Web Engineering*, Munich, Germany, 28-30 July.
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- 2003 • ABDUL RAHMAN, A., and C.TET KHUAN (2003). 3D analytical tools for terrain spatial objects. *ISPRS Commission IV Joint Workshop-Challenges in Geospatial Analysis, Integration and Visualization II*, September 8-9, Stuttgart, Germany (on CD).
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- 2010 • 3D city modeling – current status and perspective. CPD Talk for Institution of Surveyors Malaysia (ISM) Northern Branch. 2nd. December, Hotel Bayview, Penang **(Invited paper)**
- Dynamic 3D GIS – status and current perspective. Intergeo East 2010, 19- 21 May, Istanbul, Turkey **(Invited paper)**
- Geoinformation education and research @UTM, Malaysia. MapAsia 2010 and ISG 2010, 26 – 28 July, 2010, Kuala Lumpur **(Invited paper)**
- 3D city modeling. Seminar at University of Karabuk, Turkey. 26 May, 2010 **(Invited paper)**
- 2008 • GIS Education, Research and Innovations. 3rd. National GIS Conference, 20-21 July, Kuala Lumpur.
- 3D GIS – new direction. Malaysian Centre for Geospatial Data Infrastructure (MaCGDI), January, Putrajaya
- 3D City Model for Putrajaya. Malaysian Centre for Geospatial Data Infrastructure (MaCGDI), 13th. August, Putrajaya
- 2007 • Research on 3D GIS. Colloquium at UNESCO-IHE, December, 14th. 2007. Delft, Netherlands.
- Colloquium at University of Applied Sciences on “Research on 3D GIS”. 24th. October, 2007, Stuttgart, Germany
- Colloquium at Department of Geodesy and Photogrammetric Engineering, Yildiz Technical University, Istanbul, Turkey on “3D GIS – current status and perspectives”; 12 April.
- Presentation at Istanbul Metropolitan Municipality – “GIS for Municipality”; 16 April. Istanbul, Turkey
- 2006 • Research initiatives on 3D Geoinformation. Proceedings of Survey and Mapping Conference, July 2006, Palace of Golden Horses, Serdang, Selangor.
- 2006 • Towards 3D cadastre in Malaysia (on-land and marine). Marine Boundaries Demarcation Seminar. Institut Tanah dan Ukur Negara (INSTUN). 15 June, 2006.

- 2006 • Towards 3D Cadastre in Malaysia. Autodesk Solution Day Seminar. 8 th. June, 2006. Crowne Plaza Mutiara Hotel, Kuala Lumpur
- 2006 • 3D Cadaster in Malaysia. Autodesk National Conference on Geospatial Solutions and Mapping, Pangkor Island, Malaysia
- 2005 • Framework for 3D cadastre. Invited paper for 7th. Surveyors Congress, June 2005, Petaling Jaya, Selangor, Malaysia.
- 2005 • Pre-hospital Location based services (LBS). Invited paper for 1st. International Conference on Geoinformation for Disaster Management, Delft, the Netherlands, March, 2005.
- 2004 • Colloquium on “3D Buffering Tools” at Delft University of Technology, December, Delft, Netherlands.

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- 2011 • Alias Abdul Rahman, Teng Chee Hua, and Peter van Oosterom. Embedding 3D into Multipurpose Cadastre. FIG Working Week, Marakesh, May 2011, Morocco (to appear)
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- ABDUL-RAHMAN, A. and M. I. Hassan (2008). 3D cadastre registration system. International Symposium and Exhibition on Geoinformation 2008, 13-15th. October, Putra World Trade Centre (PWTC), Kuala Lumpur
- ABDUL-RAHMAN, A., and H. F. Khalid (2008). 3D data management. International Symposium and Exhibition on Geoinformation 2008, 13-15th. October, Putra World Trade Centre (PWTC), Kuala Lumpur
- 2008 ● ABDUL-RAHMAN, A., S. A. ZULKIFLI, I. KARAS, I. BAZ, and G. BUYUKSALIH (2008). Managing 3D Geo spatial objects. GIS Deco 2008 International Workshop. June, Istanbul, Turkey.

- 2007
- ABDUL-RAHMAN, A., S. ZLATANOVA, V. COORS and C. GOLD (2007). 3D Geoinformation – where are we?. **Invited Paper** for Joint International Symposium and Exhibition on Geoinformation and GNSS. Johor Bahru, Johor, Malaysia
 - CHEN, T.K, and S. ZLATANOVA (2007). 3D buffering for 3D spatial objects. Joint International Symposium and Exhibition on Geoinformation and GNSS. Johor Bahru, Johor, Malaysia
 - ABDUL-RAHMAN, A. and U. UJANG (2007). Implementing Dijkstra shortest route for 3D indoor navigation system. Proceedings for Map Asia 2007 International Conference, Kuala Lumpur, Malaysia
 - MUSLIMAN, I.A., ABDUL-RAHMAN, A. and V. COORS (2007). Modelling dynamic weight for 3D navigation routine. Proceedings for Map Asia 2007 International Conference, Kuala Lumpur, Malaysia
 - YUSOFF, M.I, ABDUL-RAHMAN, A., and A. KATIMON (2007). GIS based hydrologic modeling for infiltration overland flow. Joint International Symposium and Exhibition on Geoinformation and GNSS. Johor Bahru, Johor, Malaysia
 - ZULKIFLI, S. A., ABDUL-RAHMAN, A. and I. KARAS (2007). Managing 3D spatial objects by using Microstation and Oracle Spatial. Joint International Symposium and Exhibition on Geoinformation and GNSS. Johor Bahru, Johor, Malaysia
 - KHALID, H., and A. ABDUL-RAHMAN (2007). Data structuring for 3D spatial objects. Joint International Symposium and Exhibition on Geoinformation and GNSS. Johor Bahru, Johor, Malaysia
 - SHARKAWI, H. and A. ABDUL-RAHMAN (2007). Indoor and outdoor navigation system based on 3D game engine. Joint International Symposium and Exhibition on Geoinformation and GNSS. Johor Bahru, Johor, Malaysia
 - NASRUDDIN, H. and A. ABDUL-RAHMAN (2007). Developing registration system for 3D cadastre. Joint International Symposium and Exhibition on Geoinformation and GNSS. Johor Bahru, Johor, Malaysia
 - UJANG, M. U., and A. ABDUL RAHMAN (2007). Development of 3D network analysis by using Dijkstra Algorithm. Proceedings of MapAsia International Conference, August, Kuala Lumpur, Malaysia.
- 2006
- ABDUL RAHMAN, A, and YOUNAS, A. Web-based dynamic visualization of 3D spatial data. Proceedings of Asia GIS International Conference, March, Skudai, Johor, Malaysia.

- 2005 • ABDUL-RAHMAN, A. and J. STOTER, and A.F. NORDIN (2005). Framework for 3D Cadaster in Malaysia. Proceedings for South East Asian Survey Congress. Bandar Seri Begawan, Brunei.
- CHEN, T. K., ABDUL RAHMAN, A, and ZLATANOVA, S. (2005). Fundamental spatial relationships for 3D GIS: the primitives relationships (PR) model. Proceedings of International Symposium and Exhibition on Geoinformation 2005, Penang, Malaysia.
- YOUNAS, A, ABDUL RAHMAN, A., CHEN, T. K., and ZLATANOVA, S. (2005). 3D topology spatial data modeling. Proceedings of International Symposium and Exhibition on Geoinformation 2005, Penang, Malaysia.
- 2004 • HELD, G., ABDUL RAHMAN, A., and S. ZLATANOVA (2004). Web 3D Geoinformation system for urban environment. *International Symposium and Exhibition on Geoinformation (ISG'04)*, Kuala Lumpur, Malaysia, 21-23 Sept.
- ABDUL RAHMAN, A, and EU, Y. C. (2004). 3D visualization of urban environment. *International Symposium and Exhibition on Geoinformation (ISG'04)*, Kuala Lumpur, Malaysia, 21-23 Sept.
- 2003 • ABDUL-RAHMAN, A., S. ZLATANOVA, and M. PILOUK (2003). Developing three-dimensional information system (3D GIS) – conceptual framework. Proceeding of International Conference and Exhibition on Geoinformation (ISG'03). 13-14 October, Shah Alam, Malaysia.
- 2002 • ABDUL-RAHMAN, A., S. ZLATANOVA and M. PILOUK. (2002). Topology for 3D spatial objects. *Proceedings of International Symposium on Geoinformation 2002*, 22-24 October, Kuala Lumpur, Malaysia.
- 2002 • CHEN, T.K and A. ABDUL-RAHMAN (2002). 3D buffering for terrain objects. *Proc. International Symposium on Geoinformation 2002*, 22-24 October, Kuala Lumpur, Malaysia.
- 2001 • ABDUL-RAHMAN, A. (2001). 2D and 3D TIN Data Structures for Surface Data. *Proc. East Asia Hydrographic Symposium & Exhibition*, 12-14 June, Kuala Lumpur, Malaysia.
- 2000 • ABDUL-RAHMAN, A., and DRUMMOND, J. (2000). Three Essential Building Blocks for 3D Triangulations. *Conference Modelling in Geography*, January 4-7, Sussex, England, U.K.
- ABDUL-RAHMAN, A., (2000). Three Dimensional Data Model. *Research Seminar Series*, Dept. of Geography & Topographic Science, University of Glasgow, 13th June, Glasgow, Scotland, U.K.
- 1999 • ABDUL-RAHMAN, A., (1999). 3D Delaunay Triangulations : an application of

AVS Visualization/Express. *Annual Conference of UK AVS/UNIRAS User Group*, Birmingham, England, U.K.

- ABDUL-RAHMAN, A. (1999). Spatial Tessellations Using an Object-Oriented Approach. *Proceeding of GIS Research UK 7th . Annual Conference (GISRUK '99)*, Southampton, U.K, 14-16th April, pp. 13-23.
- ABDUL-RAHMAN, A., and DRUMMOND, J. (1999). The Development of 2D and 3D Triangular Irregular Networks Computer Programs. *Proceedings of American Congress on Surveying and Mapping (ACSM) Conference and Exhibition* Portland, Oregon, USA. 13-17th March, pp. 38-49.
- 1998 • ABDUL-RAHMAN, A. and DRUMMOND, J. (1998). Raster-Based Algorithms for 2D and 3d TINs generations. *Proceedings of International Conference of Spatial Information Science and Technology (SIST '98)*, December, Wuhan, China.
- ABDUL-RAHMAN, A., J. E. DRUMMOND, J., and J. W. SHEARER (1998). Representation of 3D Spatial Objects, *American Congress on Surveying and Mapping (ACSM) Annual Conference and Exhibition*, 2-4th March, Baltimore, USA.
- 1996 • ABDUL-RAHMAN, A., and G. DESA (1996). Identification of Developable Land Using TIN-based Digital Terrain Modelling. *International Archives of Photogrammetry and Remote Sensing*, Vol. XXXI, Part B4, Commission 4, Vienna, Australia, pp. 7-11.
- 1995 • ABDUL-RAHMAN, A., (1995). Digital Terrain Modelling Using Contour and GPS Data. *Proceedings of the 1st . Joint European Conference and Exhibition on Geographic Information*, Den Haag, The Netherlands, Vol. 1, pp. 216-218.
- 1994 • ABDUL-RAHMAN, A., (1994). Design and Evaluation of TIN Interpolation Algorithms, *Proceedings of the 5th . European Conference and Exhibition Information System*, Paris, France, Vol. 1, pp. 328-343.
- 1993 • ABDUL-RAHMAN, A., KUNARAK, and ROKHYADI (1993). Digital Topographic Database for GIS and Digital Mapping: A Case Study for Luberon National Park, Southern France. *Proceedings of 13th . Annual ESRI User Conference*, Palm Spring, California, USA. Vol. 2, pp.243-260.

National Conference Proceedings

- 2001 • ABDUL RAHMAN, A., ZLATANOVA, S., PILOUK, M., (2001). 3D GIS development : status and prospects. *Geoinformation 2001 Conference & Exhibition*, 12-23 November, Penang, Malaysia.

- ABDUL RAHMAN, A., (2001). The topology for 2.5D and 3D data. Geoinformation 2001 Conference & Exhibition, 12-23 November, Penang, Malaysia.
- 2001 • ABDUL RAHMAN, A., (2001). GIS technology: an overview. Seminar Ukur Terkini untuk Arkeologi. 31 Oktober, 2001, UTM Skudai, 7 p.
- 2000 • ABDUL RAHMAN, A., and DRUMMOND, J.E (2000). Why is 3D GIS Difficult to Realise?. Geoinformation 2000 Seminar, 14-17 November, Serdang, Selangor, Malaysia.

Monograph

- 1996 • ABDUL-RAHMAN, A. (1996). Some Turbo Pascal Programs for DTM Data Processing and Format Conversions, Faculty of Geoinformation Science & Engineering (FKSG), UTM, 65 p.
- ABDUL-RAHMAN, A. (1996). Penjanaan Model Rupabumi Berdigit dengan Perisian ReTIN (ReGIS) version 4.4. Faculty of Geoinformation Science & Engineering (FKSG), UTM, 17 p.
- 1995 • ABDUL-RAHMAN, BUSU, I., and HASHIM, M.G. (1995). Pemetaan Berdigit (Digital Mapping). Faculty of Geoinformation Science & Engineering (FKSG), UTM, 281 p.
- 1993 • ABDUL-RAHMAN, A. (1993). Model Rupabumi Berdigit. Faculty of Geoinformation Science & Engineering (FKSG), UTM, 69 p.
- ABDUL-RAHMAN, A. (1993). Pemprosesan Kartografi. Faculty of Geoinformation Science & Engineering (FKSG), UTM, 94p.

Other Contributions (International)

- 2010 • Technical Paper reviewer for International Journal of Geoinformation Science (IJGIS). Publisher : Taylor and Francis
- Technical Paper reviewer for Journal of Civil Engineering. Korean Civil Engineering Society.
- 2008 – 2012 Chair for ISPRS (International Society for Photogrammetry and Remote Sensing) Commission II/5 on Multidimensional GIS and Mobile Data Model
- 2010 • Scientific Committee Member, International 3D Geoinfo Conference Series

- Scientific Committee Member, Urban Data Management Society (UDMS) International Conference Series
- 2008
- Program Committee for CompGeo 2008 International Workshop
www.gdmc.nl/compgeo
 - Program Committee for International Conference on Computational Science and Its Applications (ICCSA) 2008.
www.iccsa.org
 - Program Committee for 3rd. International Workshop on 3D Geoinformation, Seoul, South Korea
 - Program Committee for Urban Data Management Symposium (UDMS). Lisbon, Portugal.
www.udms.net
- 2008
- Paper reviewer for 3rd. 3D Geoinformation International Workshop, Seoul, Korea.
Paper #1:
Using a B-rep structure to query 9-intersection topological relationships in 3D GIS – reviewing the approach and improving performance.
Author: Claire Ellul Modechai and Haklay, UCL, UK.
- Paper #2:
Making interoperability persistent: a 3D geo database based on CityGML.
Author: A. Stadler, C. Nigel, G. Kornig, and T. H. Kolbe., TU Berlin, Germany.
- 2008
- **Paper reviewer for ICCSA and GeoComp 2008 International Conference, Perugia, Italy.**
- Paper #1
Field sampling from a segmented image. (Authors: Pravesh Debba, Alfred Stein, Freek D. van de Meer, Emmanuel John M. Carranza, and Arko Lucieer)
- Paper #2
An empirical evaluation for assessing the relevance of modeling techniques in system modeling. (Authors: Javier Ortiz-Herbandez, Erika M. Nieto-Ariza, Hugo Estrada, and Guillermo Rodriguez-Ortiz)
- Paper #3
Evaluating the Viability of Pictometry@Imagery for Creating Models of the Built Environment (Authors: Astrid Jurisch and David Mountain)
Paper reviewer for SENSORS Journal (www.mpdi.org/sensors)

Paper #1
Multidirectional Scanning Model (MUSCLE) to Vectorize Raster Images with
Straight Lines.
(Authors: Ismail R. Karas, Bulent Bayran, Fatmagul Batuk, Abdullah Emin Akay,
and Ibrahim Baz)

- 2007 • **Paper reviewer for 2nd. International Workshop on 3D Geoinformation, The Netherlands.**

Paper #1: Direct sensor-oriented calibration of the projector in coded structured light system.

Author: Mohammad Saadatseresht and Akbar Jafari (Iran)

Paper #2: Automatic building modeling from terrestrial laser scanning.

Author: Shi Pu (The Netherlands)

Paper #3: 3D city modeling from LIDAR data.

Author: Rebecca Tse, C. Gold, and D. Kidner (United Kingdom)

- **Paper reviewer for MapAsia International Conference, Kuala Lumpur.**

Paper #1: Advancing Web GIS using Bentley Web Server

(Author: B. H. Beh)

- 2006 • **Paper Reviewer for Taylor and Francis Publisher and ISPRS Book Series (GI Technology for Emergency Response), Eds. S. Zlatanova and Jonathan Li)**

Paper: Visualization, Simulation, and LBS

Author: Krzysztof W. Kolodziej (USA) and Johan Hjelm (Sweden)

- 2006 • **Scientific Board for 1st. International Workshop on 3D Geoinformation 2006 (<http://www.gdmc.nl/zlatanova/3Dgeoinfo2006/>)**

Reviewer for the following papers/abstracts:

Paper #1

Multi-Sensor GIS for 3D Mobile Mapping

Faheem Khan (Singapore)

Paper #2

Improving 3D Registration Accuracy of LASER Scanning Point Clouds Using Photogrammetric Targets

Zulkepli Majid (Malaysia)

Paper #3

3D Integral Modeling for City Surface & Subsurface

Wang Yanbing, Wu Lixin, Shi Wenzhong, and Li Xiaojuan (China)

Paper #4

The Application of GIS In Maritime Boundary Delimitation

I Made Andi Arsana (Indonesia), Chris Rizos (Australia), and Clive Schofield (Australia)

Paper #5

On the road from flat maps to 3D geographic media: important aspects of global model-map systems

J. Kolář (Denmark)

Paper #6

A Virtual Reality Mine System Based on Spatiotemporal data model and 3D Web GIS

Zhaofeng XU (Japan)

Paper #7

Volumetric Spatiotemporal Data Model

Mohd Shafry Mohd Rahim, Abdul Rashid Mohamed Shariff, Shattri Mansor, Ahmad Rodzi Mahmud (Malaysia)

Paper #8

Cristage : a 3D GIS with a logical crystallographic layer to enable complex analyses

B. Poupeau, and O. Bonin (France)

Paper #9

Improving the Visual Realism of Existing 3D City Models

Martin Kada, Norbert Haala, and Susanne Becker (Germany)

Paper #10

Integration of Photogrammetry and LIDAR in Multi-Sensor Environment

Ayman Habib, and Mwafag Ghanma (Canada)

Paper #11

On-line Integration of Photogrammetry and GIS in order to Generate Fully Structured Data for GIS

Hamid Ebadi, and Farshid Farnood Ahmadi (Iran)

Paper #12

Use Of 3D Visualization in Natural Disaster Risk Assessment For Urban Areas

S. Kemec and H. S. Duzgun (Turkey)

Paper #13

True Ortho-photo Generation from High Resolution Satellite Imagery
Ayman Habib, Ki In Bang, and Chang Jae Kim (Canada)

Paper #14

Decentralized 3D Geovisualization Media

L. Bodum, and M. Jaegly (Denmark)

Paper #15

The Development of Designing 3D of Virtual Laboratory for Chemistry Subject (Acid, Base and Salt) Based on Constructivism-Cognitivism Ness-Contextual Approach

Hajah Norasiken Bakar and Halimah Hj Badioze Zaman (Malaysia)

Paper #16

3D Terrain Modelling: Data Collection Techniques

Ismat M. El Hassan (Saudi Arabia)

Paper #17

LIDAR-Aided True Ortho-photo and DBM generation system

Ayman Habib and Changjae Kim (Canada)

Paper #18

Spatial Object Structure for Handling 3D Geodata in Grifinor

E. Kjems, and J. Kolar (Denmark)

Paper #19

The integration Methods of 3D GIS and 3D CAD

Li Juan (China), Tor Yam Khooon (Singapore), Zhu Qing (China)

Paper #20

Development of Country Mosaic using IRS-WiFS data

Ch.Venkateswara Rao, P.Sthyanarayana, D.S,Jain, A.S.Manjunath, K.M.M.Rao (India)

Paper #21

3D Landscape Reconstruction and Environment Visualization with LiDAR Data

Xiaoye Liu, Zhenyu Zhang (Australia)

Paper #22

3D Visualization and Virtual Reality for Cultural Heritage Diagnostic

Lucio Colizzi, Fabio De Pascalis, and Francesco Fassi (Italy)

Paper #23

Surface Matching Strategy for Quality Control of LIDAR Data

Ayman Habib and Rita Cheng (Canada)

Paper #24

Definition of the 3D content and of the geometric level of congruence of numeric cartography

Raffaella Brumana, Francesco Fassi, and Federico Prandi (Italy)

Paper #25

3D Modeling and Complex Analysis of Surface With 3D Orthophoto to The Real Scale: Basilica Of San Marco In Venice

R. Brumana, L. Fregonese, C. Monti, C. C. Monti, and G. Monti (Italy)

Paper #26

3D multi-scale modelling of the interior of the Real Villa of Monza

Cristiana Achille, Raffaella Brumana, Francesco Fassi (Italy)

Paper #27

3D visualization and analysis of Laser Scanner surfaces to support diagnose and not invasive survey of cultural heritage

Raffaella Brumana, Francesco Fassi, and Luigi Fregonese (Italy)

Paper #28

Mainz Mobil 3D – a 3D navigation system for PDAs based on the OGC Web3D Service

Manuel Fischer, Jens Basanow, and Alexander Zipf (Germany)

Paper #29

The Study and Application of Object-oriented Hyper-graph Spatio-temporal Reasoning Model

Luo Jing, Cui Weihong and Niu Zhenguo (China)

Paper #30

Reconstruction of 3D Model Based on Laser Scanning

LU-Xingchang, and LIU-Xianlin (China)

Paper #31

3-Dimensional Cadastre Model in Indonesia for Land and Building Taxation Purposes

Hendriatiningsih, S., Irawan Sumarto, Bambang Edhi Leksono, and Iwan Kurniawan (Indonesia)

Paper #32

The Fusion and Visualization of 3D phototopographic data

Yang Ming Hui, Ren Wei Chun, Guan Hong Wei, and Wang Kai (China)

Paper #33

The Use Of Different Approaches for Sampling Plan in the Iranian Playa Margins

S. K. Alavi Panah (Iran)

Paper #34

Web-based GIS-Transportation framework data services using GML, SVG, and X3D

Hak-Hoon Kim and Kiwon Lee (South Korea)

Paper #35

Design and implementation of mobile 3D city landscape authoring/rendering system

Seung-Yub Kim and Kiwon Lee (South Korea)

Paper #36

Integrating a computing fluid dynamics simulation and visualization with a 3D virtual walkthrough – a case study of Putrajaya

Puteri Shireen Jahnkassim, Maisarah Ali, Noorhanita Abdul Majid, Abdul Razak Sopian, Mansor Ibrahim (Malaysia)

Paper #37

Automatic Generation of Pseudo Continuous LODs from 3D Polyhedral Building Models

Jiann-Yeou Rau, Liang-Chien Chen (Taiwan)

Paper #38

3D GEO-DATABASE IMPLEMENTATION USING CRANIOFACIAL GEOMETRIC MORPHOMETRICS DATABASE SYSTEM

Denisuwardhi, Albert Chong (New Zealand), Halim Setan (Malaysia)

Paper #39

COMPUTER ASSISTED SURGICAL PLANNER FOR CRANIOFACIAL RECONSTRUCTION – 3D VISUALIZATION

Mohammad Azam Rana, Halim Setan, Zulkepli Majid, and Albert K. Chong (Malaysia, New Zealand)

Paper #40

GIS-based Multidimensional Approach for Modeling Infrastructure Interdependency

Rifaat Abdalla, Harris Ali, and Vincent Tao (Canada)

Paper #41

Reconstruction for complex buildings using LIDAR and 2D maps

Tee-Ann Teo, Jiann-Yeou Rau, Liang-Chien Chen, Jin-King Liu, Wei-Chen Hsu (Taiwan)

Paper #42

Using 3D Fuzzy topological relationships for Checking of Spatial Relations between Dynamic Air Pollution Cloud and City Population Density

Roozbeh Shad, Mohamad Reza Malek, Mohammad Saadi Mesgari, Alireza Vafaiezhad (Iran)

Paper #43

MOVING TOWARDS 3D – FROM A NATIONAL MAPPING AGENCY PERSPECTIVE

Dave Capstick and Guy Heathcote (United Kingdom)

Paper #44

DEVELOPING 3D REGISTRATION SYSTEM FOR 3D CADASTRE

Mohd Hasif Ahmad Nasruddin and Alias Abdul Rahman (Malaysia)

Paper #45

Building Reconstruction – Outside and In

Christopher Gold, Rebecca Tse and Hugo Ledoux (United Kingdom)

Paper #46

Developing a Spatial Data Clearinghouse for Iran Using SVG Technology

Ehsan Mohammadi, Hossein Mohammadi (Iran)

Paper #47

An approach for 3D visualization of pipelines

Sisi Zlatanova (The Netherlands)

Paper #48

GROUND-BASED AND AERIAL IMAGERY COOPERATION FOR HIGH-QUALITY GEOREFERENCED IMAGE DATABASE CREATION

B. Soheilian, O. Tournaire, L. Pénard, N. Paparoditis (France)

Paper #49

RECONSTRUCTION OF LASER-SCANNED TREES USING FILTER OPERATIONS IN THE 3D RASTER DOMAIN

Ben Gorte and Daniel Winterhalder (The Netherlands)

Paper #50

0-D FEATURE IN 3-D PLANAR POLYGON TESTING FOR 3D SPATIAL ANALYSIS

Chen Tet Khuan, and Alias Abdul Rahman (Malaysia)

Paper #51

A Geospatial Approach to Managing Public Housing on Superlots

Jack Barton and Jim Plume (Australia)

Paper #52

Conception of 3D Geodata Web Service for support of indoor navigation with GNSS

Stephan Mäs, Fei Wang and Wolfgang Reinhardt (Germany)

Paper #53

Building 3D GIS Modeling Applications in Jordan: Methodology and Implementation Aspects

Nedal Al-Hanbali, Sameeh Rawashdeh, Eyad Fadda (Jordan)

Paper #54

3D NAVIGATION FOR 3D-GIS –INITIAL REQUIREMENTS

Ivin Amri Musliman, Alias Abdul Rahman and Volker Coors (Malaysia, Germany)

Paper #55

The ASTER DEM generation for Geomorphometric analysis of Central Alborz Mountains, Iran.

Seyed R. Mousavi, Karim Solaimani, Mohammad R. Kanani (Iran)

Paper #56

Modeling 3D Moving Objects Under Uncertainty Conditions

Shokri, T., M. R. Delavar, M. R. Malek and A. U. Frank (Iran, Austria)

Paper #57

A 3D NETWORK ANALYSIS APPLICATION FOR INDOOR

Ismail Rakip Karas, Fatmagül Batuk, Abdulah Emin Akay (Turkey)

Paper #58

Digital Elevation Models with *SRTM* Data by different interpolation methods

Bernardes, T.; Gontijo, I.; Andrade, H.; Vieira, T. G. S.; Alves, H. M. R. (Brazil)

Paper #59

Automated 3D modeling of buildings in suburban areas based on integration of image and height data

Kouros Khoshelham (Iran)

Paper #60

Implementing Dijkstra shortest path algorithm in 3D building environment

Muhamad Uznir Ujang and Alias Abdul Rahman (Malaysia)

Paper #61

INTEGRATION OF GIS AND DIGITAL PHOTOGRAMMETRY IN BUILDING SPACE ANALYSIS

Mokhtar Azizi Mohd Din and Mohammed Yaziz b. Ahmad (Malaysia)

Paper #62

Developing Malaysian 3D Cadastre System – preliminary finding

Muhammad Imzan Hassan, Alias Abdul Rahman (Malaysia) and Jantien Stoter (The Netherlands)

Paper #63

Reducing Complexity in Imitating Volume Function on Character of Layered Object

LI Qingyuan (China)

Paper #64

Macro to Micro Archaeological Documentation: Building a 3D GIS Model for

Jerash City and Artemis Temple

Nedal Al-Hanbali, Omar Al Bayari, Bassam Saleh, Husam Almasri (Jordan),
Emmanuel Baltsavias (Switzerland)

Paper #65

Irrigated areas and actual evapotranspiration by remote sensing methods – a case study in Sana’ a Basin, Republic of Yemen

Ayoub Ahmed Almhhab, Ibrahim Busu, and Norkhair Ibrahim (Malaysia)

Paper #66

Feature based spatio-temporal data model

Weihong Cui, Wenzhong Shi, Xiaojuan Li, Luoqing, Zhenguo Niu (China, Hong Kong)

Paper #67

Texture Generation and Mapping Using Video Sequences for 3D Building Models

Fuan Tsai, Cheng-Hsuan Chen, Jin-Kim Liu and Kuo-Hsing Hsiao (Taiwan)

- 2005 • **Scientific Board for GISPlanet International Conference Series**
(<http://www.gisplanet.org>).

Reviewer for the following papers/abstracts:

Paper #098:

XML Web Services based development model for interoperable Internet GIS applications.

Paper #0122:

Interactive tables for collaborative work using geographic information.

Paper #0195:

Use of GIS technology for epidemiological studies.

Paper #0114

Generation of DEM suitable for spatial analyses requirements.

Paper #0196

Mapping public risks from epidemiological data.

Paper #0287

WinGIS the European GIS solution for decision makers and end users.

Paper #0439

Linear Referencing as a Process - Moving beyond data models and objects.

Paper #0543

A methodology to assess environment risk and vulnerability

- 2005 • **Scientific Board for International Conference on Geoinformation for Disaster Management Series (<http://www.gdmc.nl/gi4dm>).**

Reviewer for the following papers/abstracts:

Rifaat Abdall and Vincent Tao. "Integrated Distributed GIS Approach for Earth Quake Disaster Modelling and Visualization".

A. Biasion. "Laser Scanning Applications on Disaster Management".

Soghra Darzi. "Flood Disaster Management in Urban Area".

Philip Frost. "Advanced Fire Information System".

Richard Guillande. "Web Portal for Fast Delivery of Geoinformations and Earth Data on Hazards".

Ali Mansourian. "Development of a Web based GIS using SDI for Disaster Management".

Petr Rapant. "Visual System for Metric 3D Data Gathering and Processing in Real Time".

Dusan Sakulski. "Geoinformation as an Integral Components of the National Disaster Hazards and Vulnerability "Atlas"".

Tej Thapa. "Flood Risk Assessment Using Remote Sensing and GIS for Grassland Biodiversity Conseravtion in Karnalai Flood Plain of Royal Bardia National Park, Nepal.

Stanislav Franges. "GIS of the Croatian Cities at the Adriatic Coast".

Ambrose S. Oroda. "Ignored Divastating Disasters: the Case of the Horn of Africa".

- 2004 • Colloquium on 3D Spatial analysis. GIS Technology Section, TU Delft, the Netherlands, December, 2004.
- 2004 • International Workshop for ISG 2004. 3D GIS – concept, implementation and issues. Kuala Lumpur, Malaysia, Sept. 2004
- 2004 • International Workshop for GISDECO'04. Implementing Statewide GIS. Skudai, Johor, Malaysia, May, 2004

Other contributions (National)

- 2010 • Panel Auditor for Code of Practice for Institutional Audit (COPIA), MQA.
- 2006 till todate Member of Geomatic and Land Survey (GLS) Division of Institution Surveyors Malaysia (ISM).
- 2001 • GIS Panel for MIGHT (Malaysian Industry-Government for High Technology) / Prime Minister Department (Development of National GIS Spatial Database).

Other contribution (State)

- 2001 - 2003 • JoGIS Technical Committee, Johor Economic Planning Unit (UPEN).

6. CONSULTANCY

- 2008 • Consultant for Istanbul Metropolitan Municipality, Turkey on GIS project implementation (date: 3 – 21th. June)
- 2007 • Consultant for Istanbul Metropolitan Municipality, Turkey on GIS project implementation (date: 9 – 19th. April)
 - Consultant for City of AlKhabra, Medina, Saudi Arabia, on GIS project (September)
- 2002 • Technical Advisor for Johor GIS Project. Phase 1 and Phase 2 (The project discontinued from 2005).
- 2002 • One day course “GIS for Decision Makers / Managers”, Allson Klana Resort, Seremban, Negeri Sembilan (RM13,500).
 - Introduction to GIS short course for NaLIS Land-related Agencies (RM 42,000 @ RM 14,000 x 3 sessions), June/July, 2002.
 - GIS Database Development short course for NaLIS (rm 75,000@ RM 25,000 x 3 sessions), June/July, 2002.
 - Introduction to GIS short course for NaLIS (National Land Information System) (RM 42,000 @ RM 14,000 x 3 sessions), April, 2002.
 - GIS Database Development short course for NaLIS (RM 75,000 @ rm 25,000 x 3

sessions), April/May, 2002.

- 2001 • Pergau Soil Erosion and Slope Stability Mapping, Client: TNB Research Sdn. Bhd. (RM 300,000).
- Sungai Segget and Sungai Tebrau Rehabilitation Project. Client: Dept. of Environment (DOE). Collaboration with UTM IPASSA (RM 1.4 mil.)
- GIS Database Development short course for NaLIS Agency (RM 92,100).
- 2000 • GIS short course for the Malaysian Forestry Department (RM 19,000).
- 1993 • Close-Range Photogrammetry for Kuala Lumpur Museum Authority.
- 1994 • Digital Terrain Modelling (DTM) and GIS Workshop (RM 10,000).
- 1993 • GIS Database Development Workshop (RM15,000).
- 1993 • Introduction to GIS Workshop (RM 15,000).

7. SERVICES

University

- 2009 – till today • Head of 3D GIS Research Lab
- 2007 – till to-date • Deputy Dean (Research and Postgraduate Studies)
- 2006 – till to-date • Professor
- 2006 - 2007 • Deputy Dean (Academic and International)
- 2002 (October-present) • Associate Professor
- 1992-2002 (October) • University Lecturer
- 2002 – 2004 • Head, GIS Unit, Institute for Geospatial Science and Technology (Insteg).
- 2000-2002 • Director, Center for Geographic Information and Analysis (CGIA)
- 2001-present • Member for UTM Aerospace, IT and Communication Focus Group Committee.

- 1993-1995 • Head, Department of Geoinformatics (formerly known as Dept. of Photogrammetry & Cartography).
- 1987-1989 • Head, Photogrammetry Laboratory
- 1992-1993 • Head, Cartographic Laboratory
- 1987-1992 • Assistant Lecturer 'A'
- 1983-1987 • Assistant Lecturer 'B'

8. AWARDS

- 2010 Gold Medal for Javascript program for enhancing buildings texture
- 2008 Bronze Medal for 3D spatial operations for Geo DBMS. Malaysian Technology Exposition (MTE) 2008, PWTC Kuala Lumpur
- 2007 Silver Medal for 3D spatial operations for Geo DBMS research. Industrial and Technology Exhibition (INATEX 2007), August.
- 2006 Best Technical Paper Award, Institution of Surveyors, Malaysia (ISM)
- 2005 Excellent Service Award, UTM
- 2005 Anugerah Penerbitan Jurnal Antarabangsa. Peringkat Fakulti.
- 2005 Anugerah Penerbitan Hadiah Pertama Persidangan Antarabangsa. Peringkat Fakulti.
- 2005 Penghargaan Penerbitan Penyertaan Terbanyak. Peringkat Fakulti.
- 2003 Penghargaan Penerbitan UTM Journal Antarabangsa
- 1995 Excellent Services Award, UTM.
- 1998 GISRUK (GIS Research UK) Grant Award for Conference Expenses

9. PROFESSIONAL MEMBERSHIP

- 2004 – present Member of International Society for Photogrammetry and Remote Sensing (ISPRS)

2007 – present	Member, Institution of Surveyors Malaysia (ISM).
1992 – 1995	Member, American Society of Photogrammetry and Remote Sensing (ASPRS), USA.
	Member, Urban and Regional Information System Association (URISA), USA.

10. CONFERENCE, SEMINAR & WORKSHOP ATTENDED

- | | |
|------|--|
| 2010 | <ul style="list-style-type: none"> ● 5th International Geoinformation Conference, 3-4th November, Berlin, Germany ● World Engineering International Conference, June. Kuching, Malaysia ● International Symposium and Exhibition on Geoinformation. September, Kuala Lumpur, Malaysia ● InterGeo East. June, Istanbul, Turkey |
| 2007 | <ul style="list-style-type: none"> ● 2nd. International Workshop on 3D Geoinformation 2007, Delft, The Netherlands, 12-14 December ● 26th. Urban Data Management Symposium, Stuttgart, Germany, 10-12 October, 2007 ● Joint ISG/GNSS International Symposium and Exhibition on Geoinformation, Johor Bahru, Johor, Malaysia, 5-7 November, 2007 ● Bengkel Outcome Based Education (OBE), Hotel Equatorial, Kuala Lumpur, November, 2007 ● Bengkel Penyediaan Penilaian Program Akademik, Hotel Legacy, Melaka, December, 2007 ● Simposium Pembelajaran dan Pengajaran 2007, Hotel New York, Johor Bahru, Johor, November, 2007 ● Workshop on Strategic Management Through Balanced Scorecard, Hotel Renaissance, Melaka, 16-18 November, 2007 ● Bengkel Penilaian Program Sarjana Muda UTM, Hotel Renaissance, Melaka ● Bengkel Penyediaan Program Spec., Hotel Mahkota, Melaka |

- Seminar on Land Development for Southern Region, M-Suite Hotel, Johor Bahru, Johor
 - Bengkel Penyediaan ePortfolio, Hotel Equatorial, Melaka
 - International Conference on Computational Science and Its Applications (ICCSA) 2007, August, Sunway Lagoon Hotel, Kuala Lumpur, Malaysia
 - MapAsia 2007 International Conference, August, KLCC Convention Centre, Kuala Lumpur, Malaysia.
- 2007
- Workshop on Strategic Management Through Balanced Scorecard, Melaka, Renaissance Hotel, November 16-18
- 2006
- 25th. Urban data Manafement Society (UDMS) International Conference, Aalborg, Denmark
 - Bengkel PBL, Taman Negara Endau-Rompin, 3-5 June
 - 1st. International Workshop on 3D Geoinformation, 7-8 August, Kuala Lumpur, Malaysia
 - Survey and Mapping Conference 2005, Seri Kembangan, Selangor, Malaysia
 - International Symposium and Exhibition on Geoinformation (ISG 2006), Subang, Selangor
 - Autodesk Solution Day, Kuala Lumpur
 - Autodesk National Geospatial and Mapping Conference, Pangkor, Perak, Malaysia
 - ASIA GIS International Conference, Skudai, Johor, Malaysia
 - Map Malaysia 2006, Seri Kembangan, Selangor, Malaysia
- 2005
- South East Asian Survey Congress, Brunie
 - International Symposium and Exhibition on Geoinformation (ISG2005), Penang, Malaysia
 - Surveyors Congress, Petaling Jaya, Selangor, Malaysia
- 1987
- AutoCad Seminar, UTM, Kuala Lumpur.
- 1990
- Mapping Awareness Programme: Technical Visit to Eurosense b.v., Brussels, Belgium (organized by ITC), The Netherlands.

- Mapping Awareness Programme: Technical visit to Belgian Institute of Geographic National (IGN), Brussels, Belgium (organized by ITC).
- 1991
- 43rd Photogrammetric Week, Stuttgart, Germany.
 - Mapping Awareness Programme; Technical Visit To Dutch Cadastre, Apeldoorn (organized by ITC), The Netherlands.
 - ILWIS and GIS Data Structures Workshop, Enschede, The Netherlands.
- 1992
- 3D Photogrammetric Software, Kuala Lumpur.
- 1993
- PhotoGIS Software Seminar, Kuala Lumpur.
 - International ESRI User Conference, Palm Spring, California, USA.
 - Far East GIS Conference, Singapore.
 - 3rd . International Symposium on Large Spatial Database, Singapore.
 - UTM Curriculum, Evaluation Workshop, UTM, Skudai.
- 1994
- EGIS Conference and Exhibition, Paris, France.
 - NALIS' 94 Conference and Exhibition, Kuala Lumpur.
- 1995
- Joint European Conference on Geographic Information (GI), Den Haag, The Netherlands.
- 1996
- Photogrammetric Society Seminar, London.
 - International Society of Photogrammetry and Remote Sensing (ISPRS) Congress, Vienna, Austria.
 - Technical Visit to Center for Computer Graphics and Vision, Technical University of Graz, Austria.
 - Technical Visit to Institute of Photogrammetry, Technical University of Vienna, Austria.
- 1997
- GISRUK' 97 Conference, Leeds, England, UK.
 - Joint Societies (Photogrammetry, Cartography and Remote Sensing) Conference, Glasgow, Scotland, U.K
 - GIS Young Researcher Forum, Leeds, England, U.K

- 1998 • GISRUK' 98 Conference, Edinburgh, Scotland, U.K
- Joint Societies (Photogrammetry, Cartography and Remote Sensing) Conference, "Web Mapping", Glasgow, Scotland, U.K
- GIS Young Researcher Forum, Forum Edinburgh, Scotland, U.K
- 1999 • GISRUK' 99 Conference, Southampton, England, U.K
- International Application Software Development Conference, London, U.K
- "Land Matters", Joint Societies (Photogrammetry, Cartography and Remote Sensing) Conference, Glasgow, Scotland, U.K
- AVS/UNIRAS Annual Conference, Birmingham, England, U.K
- 2000 • International Society of Photogrammetry and Remote Sensing (ISPRS) Congress, Amsterdam, The Netherlands.
- Surface Modelling in Geography Conference, Sussex, England, U.K
- Geoinformation 2000 Seminar, Serdang, Selangor, Malaysia.
- 2001 • GIS Standard Seminar, Kuala Lumpur, 9-10 July, Malaysia.
- Geoinformation 2001 Conference & Exhibition, 12-13 November, Penang, Malaysia.
- 2002 • Seminar Meja-Bulat : Kelestarian GIS, Universiti Kebangsaan Malaysia (UKM), Bangi, 9 May, 2002.
- Internationalization of UTM Centres of Excellence / Institutes Workshop, MiCasa Hotel, March, 2002.
- South East Asia Coastal GIS for Sustainable Development Workshop, Bangkok, Thailand, 20 April, 2002
- 2003 • ISPRS Commission IV Joint Workshop for 3D Spatial Analysis, Stuttgart, Germany.
- 2004 • XXI ISPRS Congress, Istanbul, Turkey, July 12-21

11. OTHER CONTRIBUTIONS

Academic (International Level)

- 2011 • Scientific Committee member for UDMS International Conference 2011, TU Delft, The Netherlands (www.udms.net)
- 2010 • Scientific Committee member for 4th. International Workshop on 3D Geoinformation, Berlin, Germany
- 2009 • Scientific Committee member for 4th. International Workshop on 3D Geoinformation, Ghent, Belgium
- 2008 • Scientific Committee member for 3rd. International Workshop on 3D Geoinformation, Seoul, South Korea. (<http://3dgeoinfo.ous.ac.kr>)
- 2007 • Visiting Professor at Stuttgart University of Applied Sciences, Germany.
- Scientific Committee member for 2nd International Workshop on 3D Geoinformation, TU Delft, The Netherlands. (<http://www.3dgeoinfo-07.nl>)
- Scientific Committee member for UDMS International Conference. (www.udms.net)
- Local chair for Pre-conference Tutorial on LIDAR, GNSS, and 3D GIS for Joint International Conference on Geoinformation / GNSS (ISG/GNSS)
- 2006 • Chairman for 1st. International Workshop on 3D Geoinformation, Kuala Lumpur, Malaysia
- Scientific Committee for World Scientific and Engineering Academy and Society (WSEAS) on Computers
- 2005 • Scientific Programme Committee for 1st International Symposium on Geoinformation for Disaster Management. (hosted by TU Delft, The Netherlands).
- 2004 • Abstract Reviewer for 1st International Symposium on Geoinformation for Disaster Management. (hosted by TU Delft, The Netherlands).
- 2004 • 7th International GISDECO Pre-Conference Workshop – Implementing Statewide GIS. UTM, Johor.
- Local organizing committee for the 7th International GISDECO Seminar.

- 2003 • Chairman, Technical Session for the International Conference and Exhibition on Geoinformation 2003, Shah Alam 13-14 October, Malaysia.
- 2002 • South Asia Committee for South China Sea GIS Coastal for Sustainable Development, Bangkok.
- Chief Editor, Geoinformation Science Journal (ISSN: 1511-9491).
- 2001 • Editor for an article on the subject of CAD and Photogrammetry Intergration for GIS, "*Seyed yousefSadjadi (2001), An Intergration of Close-Range Photogrammetry and CAD System for Cultural Monuments; Preliminary Findings*", American Society of Photogrammetry and Remote Sensing (ASPRS) 2001.
- 1999 • Chairman for GIS/GPS Integration Session for the American Congress on Surveying and Mapping (ACMS) Conference and Exhibition, Portland, Oregon, USA.
- 1998 • How to Generate 2D TIN?, Guest Lecture for visiting Research Students and Staff from Delft Technical University, The Netherlands at the Dept. of Geography Topographic Science, University of Glasgow, Glasgow, Scotland, U.K.

Academic (National Level)

- 2007 • Technical Paper Review Committee for 1st Regional Conference on Computational Science and Technology (RCCST), Universiti Malaysia Sabah, Nov. 2007
- 2004 • Panel for UiTM IRPA Research Proposals in GIS and Remote Sensing.
- 2001 • Chairman, for the GIS and Photogrammetry session at the Geoinformation 2001 Conference, Penang.

Academic (University Level)

- 2008 • **Panel for FRGS Research Grant**
 - Project #1
Structuring Service Delivery Framework for Outsourcing Firms: a facility performance perspective. (Project leader: Dr Hishamuddin Ali)
 - Project #2
The influence of weather variation towards the reliability of MyRTK Net service. (Project leader: Dr Md.Nor Kamruddin)
 - Project #3

Theoretical framework for analyzing commercial property development process.
(Project leader: Dr Norhaya Kamarudin)

Project #4

Formulation of land erosion setback for land administration development.
(Project leader: Kamaruzaman Abd Rashid).

- 2007 • Panel for eScience Fund

Project #1

WPINet GPS services for precise realtime positioning, mapping and navigation
(Project leader: Tajul Arrifin Musa).

Project #2

Traffic accident and management system (Project leader: Zulkepli Majid)

Project #3

A dual-FBG configuration for use as Fabry-Perot device (Project leader: Assoc Prof Dr Rosly Abdul Rahman)

Project #4

Developing methods for using model-driven architecture to develop quality software products at low cost entirely by re-use of existing components (Project leader: Prof Dr Robert Michael Colomb – Visiting Professor at Faculty of Computer Science and Information System)

- 2007 • Panel for FRGS Research Project Monitoring (July)

- Member for University's Generic Skills and Graduate Employability Task Force.

- 2007 • Panel for Fundamental Research Grant Scheme (FRGS)

Project #1

Water Circulation Algorithm using Satellite Altimetry Data (PI: Mohd Ibrahim Seeni Mohd)

Project #2

Algorithm for Coastal Erosion Modelling from Satellite SAR Sea Surface Current (PI: Mohd Ibrahim Seeni Mohd)

Project #3

Modelling of Local Atmospheric Transmission for Malaysian Regions for High Altitude Remote Sensing and Other Applications (PI: Ibrahim Busu)

- 2007 • Panel for eScience Research Proposals (Internal reviewer)

- Project #1: Development of direct reflection measurement system for real time monitoring of landslide prone areas (PI: Wan Abdul Aziz b. Wan Mohd Akib)
 - Project #2: Development of digital camera calibration software using bundle adjustment method (PI: Anuar Ahmad)
 - Project #3: Near realtime GIS database updating system using geo telecommunication technologies (PI: Abdullah Hisham Omar)
 - Project #4: Web based dynamic cadastral block segmentation and network adjustment of land records (PI: Abdullah Hisham Omar)
 - Project #5: Development of geospatial multimedia mapping and spatial acquisition system (PI: Abdullah Hisham Omar)
- 2006 • Panel for eScience Research Proposals (Internal reviewer)
- Project #1: Craniofacial Surgical Planner (PI: Halim Setan)
 - Project #2: Real-time data acquisition for deformation monitoring (PI: Halim Setan)
 - Project #3: The development and mapping of realtime local atmospheric model for precise positioning and navigation (PI: Md Nor b. Kamarudin)
- 2006 • Panel for Research Projects to Monograph Publication
- Report #1: Integrasi Pengurusan Fasiliti dan GIS bagi Pihak Bekuasa Tempatan (PI: Ibrahim @ Atan Sipan)
 - Report #2: The application of GIS for non point source pollution detection (PI: Taher Buyong)
 - Report #3: Development of spatial information system for electoral management and election system (PI: Norkhair Ibrahim)
 - Report #4: The application of GIS for preliminary selection of dumping site (PI: Taher Buyong)
 - Report #5: The conjugate gradient methods for the adjustment (PI: Taher Buyong)
 - Report #6: The development of a new technique for precise vision metrology (PI: Halim Setan)
 - Report #7: Kelakuan atmosfera hampur ufuk dengan kaedah astronomi dan GPS (PI: Saupi Che Awang)
 - Report #8: The integration of GPS and metrological observation for tropospheric model development in Malaysian region (PI: Md. Nor Kamaruddin)
 - Report #9: Development of Rapid and accurate 3D modeling for engineering applications (PI: Halim Setan)
 - Report #10: The integration of satellite tracking data and geospatial information for land slide deformation modeling (PI: Wan Abdul Aziz b. Wan Mohd Akib)

- 2006 • Paper presentation on “Implementing Generic Skills at FKSG”.
Symposium Pembelajaran dan Pengajaran (P&P) UTM. Persada
International Convention Centre, Johor Bahru. 5 – 6 December, 2006
- 2006 • Workshop on “Revisit UTM graduate attributes”. 7 November 2006,
Sofitel Resort, Senai, Johor Bahru, Johor.
- Workshop on “Revisit UTM Undergraduate programmes specification”.
10-12 November, 2006. Mahkota Hotel, Melaka.
- Workshop on “UTM Student Portfolio”. 17-19 November, 2006.
Equatorial Hotel, Melaka.
- Workshop on “Academic Auditing - QA”. 26 – 28 November, 2006.
Hotel Hyatt, Johor Bahru, Johor.
- Workshop on “UTM Journal”. 1 December, 2006. Pulau Spring Resort,
Skudai, Johor Bahru, Johor.
- Workshop on “E-Learning”. 30 November, 2006, CTL, UTM, Skudai,
Johor.
- 2006 • IRPA E. A. R. Projects Monitoring Panel
- Development of real time precise point positioning system using OEM GPS
Engine (Project leader: Assoc Prof Kamaludin Hj. Omar)
 - a. Development of effective monitoring system for the national geodetic vertical
datum (NGVD) in Malaysia using GPS technology (Project leader: Assoc Prof
Kamaluddin Hj. Omar)
 - b. Development of spatial based information system and models for the analysis,
management and use planning Waqf properties (Project leader: Assoc Prof Dr
Abdul Hamid Mar Iman)
 - c. Automated rating valuation system with spatial techniques using geographic
information system and hedonic models for local authorities (Project leader:
Assoc Prof Dr Abdul Hamid Mar Iman)
 - d. Spatial modelling for mental health home care management using geographic
information system (GIS) (Project leader: Zamri Ismail)
 - e. Developing an autonomous positioning and navigation module for low satellites
(Project leader: Assoc Prof Dr Mustapha Din Subari)
 - f. Development of geographic information system for spatial analysis to enhance
property tax valuation and management for local authorities (Project leader:
Assoc Prof Dzulkarnaian Daud)

- g. Anti snoofing algorithm for GPS satellite navigation (Project leader: Assoc Prof Azmi Hassan)
- 2004
- IRPA E.A.R Projects Monitoring Panel
 - Development of spatial based information system multiuser networking and analysis models for the management and use. (Project Leader: Assoc Prof Dr Abdul Hamid b. Mar Iman)
 - A development of a web based geographical information system (GIS) application for industrial information search. (Project Leader: Assoc Prof MohdNor Said).
 - Development of spatial information system for electoral management and election result analysis. (Project Leader: Assoc Prof Dr Norkhair Ibrahim)
 - Sensor for detecting oil palm variability due to infertility and growth stress (Project Leader: Prof Dr Mazlan Hashim).
 - The development of low cost integrated marine navigation system for leisure crafts and small boats. (Project Leader: Assoc Prof Dr Mohd Razali Mahmud).
- 2004
- Paper reviewer for Jurnal Teknologi (B), Penerbit UTM ; “Rekabentuk Sistem Antaramuka Pengguna dan beberapa Aplikasi Terpilih”.
- 2004
- Evaluation Panel for IRPA Top Down (Prioritized and Strategic) Research Proposals, March, 2004.
 - Development of Construction Information and Learning System for Knowledge Management (Project Leader: Assoc Prof Dr Hakim Mohamed).
 - Building Cryptographic Support in Commercial Database (Project Leader: Prof Zailani Mohamed Sidek)
 - Renewable Energy and Value-added Products from Oil Palm Wastes (Project Leader: Prof Dr Farid Nasir b. Ani)
 - Application of Artificial Reefs For Marine Habitat in Malaysia (Project Leader: Prof Dr Noraieni Mokhtar).
 - Development of an Intelligent Coastal Monitoring System (ICMOS) for Effective Coastal Management Strategy in the Straits of Johor (Project Leader: Prof Hadibah Ismail)
- 2003
- Evaluation Panel for IRPA Proposal for ASITT Focus Group, 24 February

- Paper reviewer for Jurnal Teknologi (B), Penerbit UTM; The use of hybrid technique: thresholding and edge detection for identifying river from aerial photo.
- 2002
- Selection Panel for IRPA Proposal for the ASITT Focus Group, 30 Jan., 2002.
 - UTM Research Methodology Course Committee for SLAB
 - Facilitator for UTM Research Methodology Course
 - Assessment panel for SLAB research proposals
 - Technical Panel for UTM's IRPA Proposals, Pulau Spring Resort, August
- 2001
- Technical Panel for UTM's IRPA Proposals, Sofitel Resort, July
- 2001
- Selection Panel for IRPA Proposals for the ASITT Focus Group, 13 June, 2001.
- 2001
- Member, the Aerospace, IT and Communication (ASITT) Focus Group Committee
 - Member, Publication Committee
 - Facilitator, UTM's Research Methodology Course (April)
 - Assessment panel for SLAB research proposals
 - Speaker for CGIA Research Seminar, "Developing 3D GIS from scratch", Feb., 2001.
- 2000
- Chairman for Viva Examination (for M.Sc degree: Masiri bin Kaamin), 24 Nov., 2000, UTM Graduate school, Skudai.
 - Chairman for Viva Examination (for M.Sc degree: Mohamad b. Abd. Rahman), 12 December, UTM Graduate School, Skudai.
- 1988
- Panel for English Debate (organized by FPPSM, UTM).

Administration (Faculty Level)

- 2007
- Member, Academic Committee
 - Member, Tender Committee
 - Member, Quotation Committee

- Member, Committee for Quality Assurance (QA)
- Member, Panel for Academic Post Promotion – Assoc Professor
- Panel for Tutorship/Lecturership Interview
- Member, Facility and Maintenance Committee
- 2006 • Member, Academic Committee
- Member, Panel for Postgraduate Abstracts
- 2004 • Member, Academic Committee
- Member, Softcopy Photogrammetry Tender Committee (Fund : Islamic Development Bank, IDB)
- 2002 • Member, Organizing Committee for International Symposium and Exhibition on Geoinformation 2002.
- Chairman, Publication Committee for the International Symposium and Exhibition on Geoinformation 2002.
- Coordinator, SLAB Research Methodology Course.
- Facilitator, SLAB Research Methodology Course.
- 2002 • Member, Colloquium and Seminar Committee
- Member, Academic Publication Committee
- Member, Research Committee
- 2001 • Member, the World Class University Strategic Action Plan for FKSG, Melaka, 6-8 July.
- 2001 • Member, the World Class University Strategic Action Plan for FKSG, Putrajaya, 27-29 March.
- 1993 • Member, Buletin Ukur Board of Editors
- Examination Panel for Undergraduate Projects
- Panel for Survey Camp (3DUT, and 3 SUT) Projects
- 1993 • South East Asian Regional Conference on Education and Research in Remote Sensing, UTM, Skudai (Organizing Committee).

- 1995 • Member, Academic Board.
- Member, Research Committee.
- Member, Consultancy Committee.
- 1996 • Technical Visit to Kinta Kellas, Kuala Lumpur (organizer: Dept. of Geoinformatics and Geoinformatics student).
- Panel for the Discussion on Problems and Prospects for Land Surveying and Geoinformatics Students, UTM, Kuala Lumpur.

Sport Activities (Faculty and University Level)

- 1987/88 • UTM Table Tennis Open (double): champion
- UTM representative for Table Tennis Team, Intervarsity Games, USM, Penang.
- 1988/89 • Land Survey Society Championship (Table Tennis), Single: champion
- 1993/94 • BKFU (Badan Keluarga Fakulti Ukur) Table Tennis (Single and double); champion.
- 1994/95 • BKFU (Badan Keluarga Fakulti Ukur) Tennis (runners-up).

12. RELEVANT I.T SKILLS

- Programming languages: Highly proficient in object-oriented (OO) programming using C++. Proficient in Windows based programming using Object Windows Library (OWL) OF Borland compiler, and Turbo Pascal.
- GIS software : Proficient in Arc View, PC and Workstation ArcGIS, and ILWIS ver.2.2
- Internet programming: XML, VRML, X3D.