

## NABILAH NAHARUDIN (Gs, Dr)

Senior Lecturer

Centre of Studies for Surveying Science and Geomatics  
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Selangor, Malaysia.

Research Interest Group – Built Environment and Well-Being

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## Areas of Expertise

GIS, Spatial Analysis, Network Analysis, Spatial-MCDA, AHP-ANP

<https://expert.uitm.edu.my/profile.php?id=7SDJ+BiQKfOyjE3NDc6GwXkqtnUXIBeukitowW6yiso=>  
<https://prisma.uitm.edu.my/prisma/?doit=DirectoryStafByIdDetail&staffid=Vmtab2QxUnJOVIZXVkJaT1IYcFdWbGRxVG1wTIZUbFNVRIF3UFE9PQ&dsff=Vmtab2QxUnJOVIZXVkJaT1IYcFdWbGRxVG1wTIZUbFNVRIF3UFE9PQ>  
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[https://www.researchgate.net/profile/Nabilah\\_Naharudin](https://www.researchgate.net/profile/Nabilah_Naharudin)  
<https://scholar.google.com/citations?user=HogKn78AAAAJ&hl=en&authuser=3&oi=ao>

## Personal Information

Nabilah Naharudin

Centre of Studies for Surveying Science and Geomatics

## Academic Qualifications

PhD in Geoinformation Science, 2015 – 2018, Universiti Sains Malaysia

Master in Geographical Information Science, 2013 – 2014, University of Edinburgh

Bachelor of Surveying Science and Geomatics (Honors), 2009 – 2013, Universiti Teknologi MARA

Diploma in Geomatics Science (Fast-Track), 2008 – 2009, Universiti Teknologi MARA

## Membership

1. Institution of Geospatial and Remote Sensing Malaysia (IGRSM), Member, 2020
2. International Society of Photogrammetry and Remote Sensing (ISPRS), Member, 2020
3. International Geography Union (IGU) – Transport Geography Commission, Member, 2021

## Teaching and Learning

### POSTGRADUATE DEGREE

1. Master, Programming for Spatial Science, Lecture and Practical  
Oct2021 – Feb2022, Mar2021 – Aug2021, Oct2020 – Feb2021, Mar2020 – August 2020
2. Master, Geospatial Statistics, Lecture and Practical  
Oct2021 – Feb 2022, Mar2022 – Aug2022
3. Master, GIS for Environmental Management, Practical  
Sept2019 – Jan2020, Mar2019 – Aug2019

### UNDERGRADUATE DEGREE

4. Bachelor, Dissertation II, Lecture  
Oct2021 – Feb2022, Oct2020 – Feb2021
5. Bachelor, Dissertation I, Lecture  
Mar2021 – Aug2021, Mar2022 – Aug2022
6. Bachelor, Geographical Information System I, Practical  
Oct2021 – Feb2022, Mar2021 – Aug2021, Oct2020 – Feb2021, Sept2019 – Jan2020, Mar2019 – Aug2019, Mar2022 – Aug2022
7. Bachelor, Geographical Information System II, Practical  
Mar2021 – Aug2021
8. Bachelor, Field Scheme III, Lecture and Practical  
Mar2021 – Aug2021, Oct2020 – Feb2021
9. Bachelor, Field Scheme II, Lecture and Practical  
Mar2020 – Aug2021
10. Bachelor, Principles of Surveying, Lecture and Practical  
Mar2021 – Aug2021, Oct2020 – Feb2021, Mar2020 – Aug2020, Sept2019 – Jan2020
11. Bachelor, Site Surveying II, Practical  
Mar2020 – Aug2020, Sept2019 – Jan2020, Mar2019 – Aug2019
12. Bachelor, Environmental Studies, Lecture  
Mar2019 – Aug2019

## Student Supervision

### POSTGRADUATE DEGREE

1. Nurfadhilah binti Ruslan, PhD, Spatial Walkability Index for Pedestrian Access in KL City Centre, Semester 4, Main Supervisor
2. Lutfi Bin A. Rahaman, MSc Dissertation, Walkability Analysis on Potential Heritage Trails, Ongoing (March 2022 - February 2023), Main Supervisor
3. Nurul Huda Binti Ruslan, MSc Dissertation, Transportation Planning through GIS and Multicriteria Analysis, Ongoing (March 2022 – February 2023), Main Supervisor

4. Mohamad Fariz bin Mohamad Lokman, MSc Dissertation, Hypothesizing the Best Approach Between Heat map and Hot Spot Map in Analyzing Illegal Immigrants at Klang Area, Graduated (February 2021), Main Supervisor
5. Shahira Amira binti Ibrahim, MSc Dissertation, Search and Rescue using GIS Analysis, Graduated (February 2021), Main Supervisor
6. Kamariah binti Abdullah, MSc Dissertation, Demarcation of Police Jurisdiction Boundary Map Analysis using Geospatial, Graduated (June 2020), Main Supervisor
7. Putri Khalilah binti Kamaluddin, MSc Dissertation, Suitable Analysis of Potential Site Off-Campus Accommodation, Graduated (June 2020), Main Supervisor
8. Nur Amajieda binti Mohamad Nor, MSc Dissertation, Food delivery Service Performance based on Rider GPS Data using GIS, Graduated (January 2020), Main Supervisor

## **UNDERGRADUATE DEGREE**

1. Mohamad Khairul Izzuddin bin Saidi, BSc Dissertation, Determining Optimal Location of Waste-bins by using Spatial-MCDA, Ongoing (Mar2022 – Feb2023)
2. Muhamad Sufee Farhan bin Md Rafee, BSc Dissertation, Analysing the Efficiency of Rail – Transit by Using GIS, Ongoing (Mar2022 – Feb2023)
3. Ungku Muhamad Dzar bin Ungku Abd Aziz, BSc Dissertation, Impact of Rail-Transits on Urbanization by using GIS, Ongoing (Mar2022 – Feb2023)
4. Fatin Nurfazwani bt Mohd Nuri, BSc Dissertation, Finding Cycling Routes in Selayang by using AHP and GIS, Ongoing (Oct2021 – Aug2022)
5. Muhammad Aiman bin Razidi, BSc Dissertation, Sentiment Analysis on Food Delivery Services by Using Python and GIS, Ongoing (Oct2021 – Aug2022)
6. Nor Hidayah binti Azizan, BSc Dissertation, Finding Potential Sites for Turtle Conservation Sites by using AHP and GIS, Ongoing (Oct2021 – Aug2022)
7. Nur Syaza Syazwany binti Shahrudin, BSc Dissertation, Determining Themed Walking Trails in Malacca by using Spatial-MCDA, Ongoing (Oct2021 – Aug2022)
8. Nur Nadhirah binti Muhammad Roshdy, BSc Dissertation, Rail-Transit Accessibility Index by using Analytical Hierarchy Process (AHP) and GIS, Graduated (February 2022), Main Supervisor
9. Akmal Azizi bin Ahmad, BSc Dissertation, Walkability Index in Pasir Gudang using GIS, Graduated (August 2021), Main Supervisor
10. Hafiz Asyraaf Bin Amir Adli, BSc Dissertation, Measuring Road Safety Index based on the Road Characteristic by using GIS, Graduated (August 2021), Main Supervisor
11. Lutfi Bin A. Rahaman, BSc Dissertation, Green Chain Network for Pedestrian and Cyclists by using Analytical Hierarchical Process (AHP) and GIS, Graduated (August 2021), Main Supervisor
12. Nur Amirah Binti Suhaimi, BSc Dissertation, Ambulance Emergency Responses Vulnerability Analysis Towards Traffic Condition Using GIS, Graduated (August 2021), Main Supervisor
13. Baggio Anak John, BSc Dissertation, Potential Sites for Micro-Hydropower Station by Using Spatial-MCDA, Graduated (February 2021), Main Supervisor
14. Hazmi bin Hashim, BSc Dissertation, Heat Map for Crime, Submitted (February 2021), Main Supervisor
15. Nur Nabilah Idzni binti Faisal, BSc Dissertation, Walkable and Bikeable Routes for Contactless Transportation Mode for Post Covid-19, Graduated (February 2021), Main Supervisor

16. Athirah Illaina binti Mohammad Azlan, BSc Dissertation, Analyzing Pedestrians Safety to Access LRT Stations Using Analytical Hierarchy Process (AHP) And Geographic Information System (GIS), Graduated (June 2020), Main Supervisor
17. Ihsanuddin bin Azam, BSc Dissertation, Mapping Safe Route for School Children Using Spatial-MCDA, Graduated (June 2020), Main Supervisor
18. Muhammad Hizamuddin bin Mohd Amir, BSc Dissertation, Analyzing The Impact of Pavement Defects for Motorcycle Road Safety Hotspot, Graduated (June 2020), Main Supervisor
19. Mukrimo'az bin Mat Hashim, BSc Dissertation, Finding New Optimal Location of Uniqlo in Greater KI Using AHP Method and GIS Analysis, Graduated (June 2020), Main Supervisor
20. Nadiatul Syahirah binti Rosli, BSc Dissertation, Indoor Navigation Web Apps at Central I-City Mall, Graduated (June 2020), Main Supervisor
21. Nur Syazwani bt Rosadlan, BSc Dissertation, Indoor Modelling for Visibility Analysis of Classroom Using Mobile Laser Scanner and GIS, Graduated (June 2020), Main Supervisor
22. Wan Aminah binti Wan Ramli, BSc Dissertation, Analyzing The Impact of Street Art towards Street Crime Cases using GIS Analysis, Graduated (June 2020), Main Supervisor
23. Nabila Husnina binti Mohd Azman, BSc Dissertation, Modelling Flow of Migration to Malaysia by using Geographic Information System (GIS), Graduated (January 2020), Main Supervisor
24. Nur Nasriah Nabilah binti Mohd Nasri, BSc Dissertation, Measuring the Accessibility of Maternal and Neonatal Healthcare Facilities by using AHP and GIS, Graduated (January 2020), Main Supervisor

## Publications

1. Ruslan, N., Naharudin, N., Salleh, A.H., Abdul Halim, M. & Abd Latif, Z. (2021). Mapping for Indoor Walking Environment from Point Clouds by Using Mobile Mapping Systems. *International Journal of Geospatial and Environmental Research*, 8(2).
2. Amir, M.H.M. & Naharudin, N. (2021). Geospatial Analysis on the Impact of Road Defects on Motorcycle Accidents. *IOP Conference Series: Earth and Environmental Science*, 767(1).
3. Salleh, A.H., Naharudin, N., Halim, M.A. & Ruslan, N. (2021). Feasibility Study on Walkable City Through Implementation of Car-Free Zones and its Effect on Traffic Movement in Georgetown, Penang Using GIS Network Analysis. *IOP Conference Series: Earth and Environmental Science*, 767(1). Corresponding Author.
4. Ruslan, N., Naharudin, N., Salleh, A.H., Halim, M.A. & Abd Latif, Z. (2021). Indoor Model for Walking Environment using Mobile Mapping System. *IOP Conference Series: Earth and Environmental Science* 767 (1). Corresponding Author.
5. Zaini, J.C.M., Saraf, N.M., Naharudin, N., Rasam, A.R.A. & Hashim, N. (2021). Identifying Suitable Areas for Plantation of Organic Products Using GIS and AHP. *IOP Conference Series: Earth and Environmental Science* 767 (1).
6. Azlan, A.I.M. & Naharudin, N. (2020). Measuring Safety Index for Pedestrian Path by Using. *Built Environment Journal* 17(3), 67, 75. Corresponding Author.
7. Ruslan, N., Rosadlan, N.S., Naharudin, N. & Abd Latif, Z. (2020). Mapping for Indoor Walking Path using Mobile Laser Scanning. *Built Environment Journal* 17(3), 43-50. Corresponding Author.
8. Naharudin N. & Hashim, M. M. (2020). Conceptual Framework on Finding Optimal Locations of Uniqlo Stores using Spatial Analysis, *IOP Conference Series*, IOP, Corresponding Author
9. Sing, N. M. M. N., Halim, M. A., Hashim, N. I., Hashim, N., Naharudin, N. & Rasam, A. R. A. (2020), Identification of Groundwater Potential Zones in Langkawi Through Remote Sensing and Geographic Information System (GIS) Techniques, *IEEEEXPlore, IEEE*, Fifth Author.

10. Sing, N.M.M.N., Halim, M.A., Hashim, N.I., Hashim, N., Naharudin, N. & Rasam, A.R.A. (2020). Identification of Groundwater Potential Zones in Langkawi Through Remote Sensing and Geographic Information System (GIS) Techniques. IEEEExplore.
11. Naharudin, N., Salleh, A. H., Halim, M. A. & Abd Latif, Z. (2020). Conceptual Framework for Walkability Assessment for Pedestrian Access to Rail Transit Services by using Spatial-MCDA, IOP Conference Series, IOP, Main/Corresponding Author.
12. Hashim, N, Hamid, J. R. A., Saraf, N. M., Naharudin, N., Halim, M. A. & Razali, M. H. (2019). Spectral Information Extraction from Worldview-2 Image for Urban Features Identification, IEEEExplore, IEEE, Forth Author.
13. Naharudin, N., Ahamad, M. S. S. & Sadullah, A. F. M. (2019). Criteria Influencing Pedestrian-Friendliness of First/Last Mile Transit Journey using Analytical Network Process (ANP) Group Judgement, AKADEMIKA, UKM, Main/Corresponding Author.
14. Naharudin, N., Ahamad, M. S. S. & Sadullah, A. F. M. (2017). Assessing Criteria of the Pedestrian-Friendly First/Last Mile Transit Journey by using Analytical Network Process (ANP) Group Judgment, Proceedings ICOSH-UKM 2017, Main/Corresponding Author.
15. Naharudin, N., Ahamad, M. S. S. & Sadullah, A. F. M. (2017). Optimizing Pedestrian-Friendly Walking Path for First and Last Mile Transit Journey by using the Analytical Network Process (ANP) Decision Model and GIS Network Analysis, ISPRS Archive, ISPRS, Main/Corresponding Author.
16. Naharudin, N., Ahamad, M. S. S. & Sadullah, A. F. M. (2017). Pedestrian-Attractiveness Score for the First/Last Mile Transit Route using Spatial Data Collected with a Mobile Positioning Application, IEEEExplore, IEEE, Main/Corresponding Author
17. Naharudin, N., Ahamad, M. S. S. & Sadullah, A. F. M. (2017). Framework for Developing a Spatial Walkability Index (SWI) for the Light-Rail Transit (LRT) Stations in Kuala Lumpur City Centre using Analytical Network Process (ANP) and GIS, AIP Conference Proceedings. AIP, Main/Corresponding Author
18. Naharudin, N., Ahamad, M. S. S. & Sadullah, A. F. M. (2016). GIS Data Collection for Pedestrian Facilities and Furniture using MAPinr for Android, ISPRS Archive, International Society for Photogrammetry and Remote Sensing, Main/Corresponding Author

## Research Grants and Contracts

1. Nabilah Naharudin, Abdul Hakim Salleh, Maisarah Abdul Halim, Zulkiflee Abd Latif, 2019 – 2021, Spatial Walkability Index for Pedestrian Access to Rail Transit Station by using ANP and GIS, FRGS-RACER, RM 51 200, Project Leader, Ongoing
2. Ali Hassan Mohamed Murid, Zulkiflee Abd Latif, Nabilah Naharudin, Maisarah Abdul Halim (Project Team D), 2019, Development of GIS Database for Data Management of Archeological Artefacts, Collaborative Research Grant, RM 20 000, Team Member

## Consultation & Expertise

1. UiTM, Tenaga Nasional Berhad, Kerja-Kerja Konsultansi Urusan Pentadbiran Tanah untuk TNB, 2019-2021, Member
2. UiTM, Kajian Impak UiTM 50 Tahun, 2019 – 2020, Research Member
3. Advance Geospatial and Surveying Conference (AGeoS) 2020, 2020, Judge for Poster Presentation
4. Advance Geospatial and Surveying Conference (AGeoS) 2020, 2020, Reviewer
5. 9th International Innovation, Invention & Design Competition (INDES2020), UiTM, 2020, Judge for Presentation

6. International Journal for Sustainable Cities and Society, 2020-2021, Reviewer
7. 11<sup>th</sup> RISM International Surveying Conference for Undergraduates, Royal Institution of Surveyors Malaysia, 2019, Vetting Panel

## **Innovation, Commercialization & Entrepreneurial**

1. IP/CR/02950 – Spatial Walkability Index (SWI) Toolbox (2022)
2. IP/CR/02117 – Workflow of the Development of Spatial Walkability Index (2021)
3. Member for MOOC Development – Getting Know Land (2021)

## **Services & Administration**

1. Editor, Built Environment Journal (2021)
2. Guest Editor, IOP Conference Series (GGT2022) (2022)
3. Guest Editor, IOP Conference Series (GGT2021) (2021)
4. Resource Person for GIS714, 1 January 2020 – 31 December 2021
5. Resource Person for GLS418, 1 January 2020 – 31 December 2021
6. Resource Person for GLS653, 1 January 2020 – 31 December 2021
7. Committee Member for AIMS/JSU, 1 January 2020 – 31 December 2021, Department
8. Committee Member for RICS, 1 January 2020 – 31 December 2021, Department
9. Committee Member for AP220 Curriculum Review, 2019 – 2020, Department
10. Committee Member for AP720 Curriculum Review, 2020, Department
11. Committee Member for RICS Accreditation and Re-Accreditation, 2019 – 2020, Faculty

## **Work and Collaboration Experience**

1. GIS Specialist, 2018, Rekarunding Trafik Sdn Bhd, Developing spatial database for traffic feasibility study
2. GIS Expert, 2017 – 2018, AturTrafik Sdn Bhd, Developing spatial database and performing spatial analysis for First/Last Mile Improvement Study
3. Research Project Member, 2017 – 2019, International Association for Traffic and Safety Society, Consulting the development of traffic accidents analysis in Penang

## **Awards & Recognitions**

1. Champion at ESRI Malaysia Young Scholars Award 2022, Rail-Transit Accessibility Index by using AHP and GIS, 2022, Supervisor
2. Bronze Medal Best Paper at the 14<sup>th</sup> RISM International Surveying Conference for Undergraduates 2022, Finding Cycling Routes in Selayang by using AHP and GIS, 2022, Supervisor
3. Outstanding Undergraduate Award at Built Environment Undergraduates Research Competition (BEURC) 2021, Finding Potential Routes for Green Lanes in Bandar Baru Bangi by using AHP and GIS, 2021, Supervisor
4. Gold Award at Built Environment Undergraduates Research Competition (BEURC) 2021, Finding Potential Routes for Green Lanes in Bandar Baru Bangi by using AHP and GIS, 2021, Supervisor
5. Silver Award at Built Environment Undergraduates Research Competition (BEURC) 2021, Potential Sites for Micro-Hydropower Station by using Spatial-MCDA, 2021, Supervisor
6. Silver Award at ECONDEV 2021 – MOOC

7. Winner of ODL Content Development at MAKEF 2021
8. Silver Award at Built Environment Undergraduates Research Competition (BEURC), UM, Analysing Accessibility and Level of Services of Maternal and Neonatal Healthcare using AHP and GIS, 2020, Supervisor
9. Special Mention Paper at 12<sup>th</sup> RISM International Surveying Conference for Undergraduates, Royal Institution of Surveyors Malaysia, Indoor Navigation Mobile Apps at Central i-City Mall, International, 2020, Supervisor

## **Contribution to Society**

1. Trainer for "IMR Short Course: OLS & GWR" on 27 – 28 September 2021.
2. Speaker for online sharing session with SBPI Temerloh's Form 4 and Form 5 Students "KAM12.0: Technical Science" on August 7, 2021.
3. Speaker for online sharing session with SBPI Temerloh's Form 4 and Form 5 Students "KAM12.0: Diploma and Bachelor Degree" on July 31, 2021.
4. Speaker for online sharing session with SBPI Temerloh's SPM Leavers "Habes SPM, aok nok kone?" on June 18, 2021.
5. Speaker for Short Course "Analytical Hierarchy Process (AHP) for GIS Analysis" on May 28, 2021.

## **Other Activities**

1. International Conference for Geomatics and Geospatial Technology, 2022, Secretary
2. International Conference on Research Methodology for Built Environment and Engineering, 2021, Committee
3. International Conference for Geomatics and Geospatial Technology, 2021, Secretary
4. Global Surveyors' Day, Centre of Studies for Surveying Science and Geomatics, 2019, Secretary