



CURRICULUM VITAE



Ir. Ts. Dr. EDGAR JR. JOE

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Google Scholar : Edgar Jr. Joe (h-index = 4)
ResearchGate : Edgar Jr. Joe
Website : -

Education

- Ph.D. Civil Engineering, 2022, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia (GOT)
- M.Sc. Geology, 2018, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia
- B. E Civil Engineering (Hons), 2010, Universiti Malaysia Sarawak, Kota Samarahan, Sarawak, Malaysia

Research Interest

- Rainfall-induced landslide
- Unsaturated soil mechanics
- Numerical (finite element) modelling
- Application of artificial intelligence / machine learning
- Geographic information system-based assessment
- Probabilistic and reliability-based geotechnical engineering

Professional Membership & Learned Society

- Professional Engineer, Board of Engineers Malaysia (BEM)
- Professional Technologist, Malaysia Board of Technologists (MBOT)
- Corporate Member, The Institution of Engineers Malaysia (IEM)
- Member, Malaysian Geotechnical Society (MGS)

Appointments

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| • Senior Lecturer, Department of Civil Engineering, UPM | 2026 – to date |
| • Assistant Director, Slope Branch, Public Works Department of Sabah | 2018 – 2026 |
| • Graduate Research Assistant, Universiti Teknologi Malaysia, Skudai | 2019 – 2022 |
| • Executive Engineer, Slope Branch, Public Works Department of Sabah | 2011 – 2018 |
| • Design Engineer, Jurutera Perunding Campo, Kota Kinabalu, Sabah | 2010 – 2011 |

Publications

- **Edgar Jr. Joe**, Nazri Ali, and Siti Norafida Jusoh. Reliability-based prediction of landslide using efficient Monte Carlo Simulation. IOP Conference Series. 2021. 1153. 1-11. (WOS- & Scopus-indexed)
- **Edgar Jr. Joe**, Nazri Ali, and Siti Norafida Jusoh. Numerical modelling of coupled seepage-deformation subjected to rainfall infiltration in unsaturated slope. 2020. World Journal of Engineering. 17(6). 867-875. (WOS- & Scopus-indexed)
- **Edgar Jr. Joe**, Felix Tongkul, and Rodeano Roslee. Debris flow susceptibility assessment at a basin scale: a case study at Bundu Tuhan, Ranau, Sabah, Malaysia. ASM Science Journal. 2018. 11(2). 36-48. (Scopus-indexed)
- **Edgar Jr. Joe**, Felix Tongkul, and Rodeano Roslee. Engineering properties of debris flow material at Bundu Tuhan, Ranau, Sabah, Malaysia. Pakistan Journal of Geology. 2018. 2(2). 22-26.
- **Edgar Jr. Joe**, Felix Tongkul, and Rodeano Roslee. Relationship between rainfall and debris flow occurrence in the Crocker Range of Sabah, Malaysia. Malaysian Journal of Geosciences. 2018. 2(1). 15-26.
- **Edgar Jr. Joe**. Guidelines on submission of development plan pertaining to slope works. 2018. Public Works Department of Sabah.
- **Edgar Jr. Joe**. Standard operation procedure for handing over of completed slope repair project. 2016. Public Works Department of Sabah.
- **Edgar Jr. Joe**. Slope maintenance management manual. 2015. Public Works Department of Sabah.
- **Edgar Jr. Joe**. Guidelines on slope condition survey. 2012. Public Works Department of Sabah.

Conference Proceedings/Academic Talks

- **Edgar Jr. Joe**, Nazri Ali, and Siti Norafida Jusoh. AI-enhanced probabilistic framework for rainfall-induced landslide prediction in tropical terrain: a case study from Sabah, Malaysia. International Geoengineering Conference. Genting Highlands, Pahang. 2025.
- **Edgar Jr. Joe**, Nazri Ali, and Siti Norafida Jusoh. Reliability-based framework for development of physical-based threshold for landslide initiation due to antecedent rainfall in unsaturated slope. Regional Conference in Civil Engineering and Sustainable Development Goals in Higher Education Institutions. Virtual Conference. 2020.
- **Edgar Jr. Joe**, Felix Tongkul, and Rodeano Roslee. Debris flow susceptibility assessment at a basin scale: a case study at Ulu Moyog, Penampang, Sabah, Malaysia. 12th Seminar on Science and Technology. Kota Kinabalu. 2018.
- **Edgar Jr. Joe**, Felix Tongkul, and Rodeano Roslee. Relationship between rainfall and debris flow occurrence in the Crocker Range of Sabah, Malaysia. Seminar Bencana 2017. Kota Kinabalu. 2017.

Patents

- NIL

Research Grants

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| • Slope monitoring along Jalan Istana, Kota Kinabalu, Sabah. (Leader) | Sabah State Government | 2022 – 2025 | RM 288,478 |
| • UTM Fundamental Research 20H95. (Member) | FRGS | 2019 – 2021 | - |

Community or Industry Projects/Grants

- NIL

Professional Services (Journal Reviewer, editorial works, etc.)

- **Invited panel/member/speaker**
 - Invited Speaker, National Training Week 2025, Sabah Association of Professional Technicians and Technologists. 2025
 - Research Fellow, Natural Disaster Research Centre, Universiti Malaysia Sabah. 2025
 - Industrial Advisory Panel, Master of Engineering (Coursework), Faculty of Engineering, Universiti Malaysia Sabah. 2024
 - Assessor Panel, Civil Engineering Department Innovation Exhibition (CEDIX) 15, Politeknik Kota Kinabalu. 2024
 - Speaker, Workshop on Competency in Slope Inspection, Design, and Maintenance, Public Works Department of Sabah. 2023
 - Speaker, Workshop on Competency Preparation of Slope Inventory and Landslide Remedial Proposals, Public Works Department of Sabah. 2018

- **Conference committee**
Secretary, Sabah Road Day Conference 2016

Teaching Experience

- ECV 3324 – Foundation Engineering (Year 3 Undergraduate)
- ECV 4324 – Slope Engineering (Year 4 Undergraduate)