

PROFILE

Interests are in the development of models for practical engineering application and design, the verification of numerical analysis, and the interpretation of both field and laboratory data. Current work experience as a geotechnical engineer is in the construction of Mass Rapid Transit Systems, consisting of the building of underground stations and tunnels, ground improvement, and the assessment of construction impact to surrounding buildings and structures.

Nationality : Malaysian
Place of birth : Pulau Pinang, Malaysia
Date of birth : 26 August 1987
Postal Address : 28, Jalan Kemuning Bayu 33/33B, Kemuning Utama, Shah Alam, Selangor, Malaysia.
Phone number : +6019-2676862

EDUCATION

D.Phil. (Engineering Science), University of Oxford (United Kingdom) Oct 2009 – Oct 2013

- Thesis title: Distinct Element Modelling of Jointed Rock Masses: Algorithms and Their Verification
- Supervisors: Prof. Guy Housby and Dr. Stefano Uti
- Recipient of the King's Scholarship (Public Service Department of Malaysia)
- Attended Saïd Business School (Oct 2011 – Feb 2012)
 - ❖ Completed the course "Building a Business"
- Attended the Mathematical Institute (Jan 2013 – Mar 2013)
 - ❖ Completed the course "Scientific Computing D.Phil. Students, Part 2"

B.Eng. (Civil), Nanyang Technological University (Singapore) Jul 2005 – Jul 2009

- First class honours with a minor in Business
- Enrolled in Global Immersion Program (overseas work and study exchange program) in Beijing, China from January to June 2008
- Enrolled as a president research scholar to investigate the performance of civil engineering monitoring instrumentation (strain gauges and data logger) under electromagnetic 'noise' created by welding
- Awards and Prizes:
 - ❖ Lee Kuan Yew Gold Medal for first in general proficiency in civil engineering
 - ❖ Institution of Engineers Singapore Gold Medal for distinguished academic record
 - ❖ Professional Engineers Board Gold Medal for graduating with a first class honours and having a distinguished record in co-curricular activities and public service in Singapore
 - ❖ University Scholars Award for academic excellence and displaying leadership qualities
 - ❖ Singapore Concrete Institute Book Prize for highest score in Reinforced Concrete Design
 - ❖ 3rd prize (group project) in the 2008 International Petroleum Technology Conference (IPTC) Education Week held in Kuala Lumpur, Malaysia
 - ❖ Nanyang Scholarship
- Final year project title: Underground Construction: Case Studies and Analysis
 - ❖ Supervisor: Associate Professor B. K. Low

Overseas exchange program, Tsinghua University (China) Feb 2008 – May 2008

- Completed a course (held every weekend) on the history, economy and policies of China
- Internship during weekdays at China State Construction International Co. Ltd. (China)

JOURNAL PUBLICATIONS

- Boon CW, Housby GT, Uti S (2014). [New insights in the 1963 Vajont slide using 2D and 3D Distinct Element Method analyses](#). *Geotechnique*, **64**(10): 800-816
- Boon CW, Housby GT, Uti S (2014). [Designing tunnel support in jointed rock masses via the DEM](#). *Rock mechanics and rock engineering*, (available online) DOI: 10.1007/s00603-014-0579-8
- Boon CW, Housby GT, Uti S (2015). [A new rock slicing algorithm based on linear programming](#). *Computers and geotechnics*, **65**: 12-29
- Boon CW, Housby GT, Uti S (2013) [A new contact detection algorithm for three dimensional non-spherical particles](#). *Powder Technology*, SI on DEM, **248**: 94-102
- Boon CW, Housby GT, Uti S (2012) [A new algorithm for contact detection between convex polygonal and polyhedral particles in the discrete element method](#). *Computers and Geotechnics*, **44**: 73-82