

**The Hong Kong Polytechnic University
Department of Building and Real Estate
Two (2) PhD Opportunities (Fully Funded)**

PhD Opportunity 1 – Chief Supervisor: Dr. Amos Darko

PhD Title: Automating green building assessment for the interior spaces of existing building stock through a scan-to-building information modelling and plug-in software approach

Brief description

A fully-funded PhD opportunity is currently available in the Department of Building and Real Estate at The Hong Kong Polytechnic University. Supervised by Dr. Amos Darko (Chief Supervisor), Ir Prof. Albert P.C. Chan (Co-supervisor) and Dr. Farzad Jalaei (Co-supervisor), this PhD will innovate a novel integrated automated tool for the green building assessment of the interior spaces of existing buildings. The tool developed will assist owners and occupants to rapidly and accurately assess and document the green building assessment credits for their spaces in pursuit of green building certification.

Application deadline: 31 August 2021

PhD start date: 1 January 2022

Eligibility criteria

- Undergraduate degree (First Class Honours) in Construction Management, Construction Engineering, Civil Engineering, Architecture or a related discipline, with
- Research-based master's degree

Required skills

- A background in programming with C# or Python programming language is **required**.

Preferred skills

The following are preferred but not required:

- A background in (scan-to-) building information modelling (BIM), with familiarity to work with the application programming interface (API) of Autodesk Revit software
- A background in database management system
- Knowledge of database structure and theory
- A background in machine learning

Personal attributes

- Positive, honest, humble, passionate, team player, hardworking and self-motivated
- Ability to do research independently with minimal supervision
- Pursuit faculty position in future

Application documents and procedure

- Curriculum vitae, with any supporting documents, to be sent to Dr. Amos Darko at amos1.darko@polyu.edu.hk

Contact

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**The Hong Kong Polytechnic University
Department of Building and Real Estate
Two (2) PhD Opportunities (Fully Funded)**

PhD Opportunity 2 – Chief Supervisor: Ir Prof. Albert P.C. Chan

PhD Title: Developing a computerized project success index system to monitor and benchmark the performance of hospital projects

Brief description

A fully-funded PhD opportunity is currently available in the Department of Building and Real Estate at The Hong Kong Polytechnic University. Supervised by Ir Prof. Albert P.C. Chan (Chief Supervisor) and Dr. Amos Darko (Co-supervisor), this PhD will innovate a novel computer assisted index of project success system to measure, monitor, control, enhance, and benchmark the performance of hospital projects. The system developed will help professionals and decision-makers to assess, monitor, benchmark and improve hospital project success factors in a more practical, reliable, objective and comprehensive manner.

Application deadline: 31 August 2021

PhD start date: 1 January 2022

Eligibility criteria

- Undergraduate degree (First Class Honours) in Construction Management, Construction Engineering, Civil Engineering or a related discipline, with
- Research-based master's degree

Required skills

- A background in database management system (MySQL) is **required**.

Preferred skills

The following are preferred but not required:

- A background in web development, with familiarity to work with the Hypertext Preprocessor (PHP)
- A background in computing
- Knowledge of fuzzy sets theory
- Knowledge of project success/performance assessment

Personal attributes

- Positive, honest, humble, passionate, team player, hardworking and self-motivated
- Ability to do research independently with minimal supervision
- Pursuit faculty position in future

Application documents and procedure

- Curriculum vitae, with any supporting documents, to be sent to Ir Prof. Albert P.C. Chan at albert.chan@polyu.edu.hk

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