

PhD and Postdoctoral Fellow Positions in Electrical Engineering, City University of Hong Kong

Description: there are multiple PhD and Postdoc openings at Dr. Yue Zhu's group in the Department of Electrical Engineering (EE), City University of Hong Kong (CityUHK). The research areas cover the following topics in the field of stability analysis in inverter-dominated power systems:

- Dynamics and stability analysis of IBR-dominated power systems.
- Grid-following and grid-forming IBR control optimisation.
- Data-driven on-line system modelling and monitoring enhanced by AI/ML.
- Comprehensive system strength assessment for new IBR connections.
- Tools development, including software and experimental test bench, for research on IBR-dominated power system.

PhD

maximum 5 fully funded positions (local and overseas)

Requirement:

- Preference is given to candidates who hold an MSc degree in relevant field (Electrical Engineering, Computer Science, or Control Systems) and from a recognised University.
- Candidates must meet the minimum entrance requirements of CityUHK. Details can be found here: <https://www.cityu.edu.hk/pg/research-degree-programmes/entrance-requirements>

Scholarship:

Students will be fully funded for 4 years with a monthly stipend of HK\$18,700, or HK\$19,200 for candidates with exceptional qualifications.

Application and Deadline:

please send CV and a research proposal (max. 2 pages) to yue.zhu@cityu.edu.hk.

- For September 2025 entrance, the deadline is 3rd of March, 2025.
- For January 2026 entrance, the deadline is 1st of April, 2025.

Postdoctoral Fellows

Maximum 2 positions with an initial contract of 18 months, with opportunities for extensions (subject to performance).

Requirement:

- Candidates to be appointed as a Postdoctoral Fellow should have received a PhD degree in the relevant field from a recognised University.
- Candidates should have research experience in the group's areas of focus.
- Preference is given to candidates with publications on world top tier journals and conferences (e.g., IEEE Transactions).

- Experience with MATLAB, PSCAD, RTLAB and hardware experiments with IBR is a preference.

Salary

Starting from HK\$ 300,000 per year

Application and Deadline:

please send CV, 1 reference letter, and a research statement concluding your work (maximum 2 pages) to yue.zhu@cityu.edu.hk. All materials should be in English.

Application Deadline is 1st of April.

BIO

Dr. Yue Zhu has joined City University of Hong Kong as an Assistant Professor in February 2025, under the Presidential Assistant Professors Schemes (one of the 10 receipts across the University and the sole awardee in the Department of Electrical Engineering). He received his B.Eng. and M.Sc. degrees from Zhejiang University, followed by a Ph.D. in Electrical Engineering from Imperial College London, where he also served as a Postdoctoral Research Associate. Before joining CityUHK, he was also engaged by the UK National Energy System Operator (NESO) as an external expert to provide specialized technical support.

Dr. Zhu's research focuses on stability, dynamics, and control of large-scale inverter-dominated power systems, addressing critical challenges including system oscillations, data-driven impedance identification, and system strength assessment for connections of new inverter-based resources. He has authored over 10 journal papers in top-tier IEEE Transactions, and contributed to the 2024 CIGRE Green Book. Dr. Zhu is dedicated to translating his research work into real-world applications through close collaboration with industry partners. During his postdoctoral period, he served as the primary researcher on two industrial projects funded by NESO, and the Co-Investigator on a Strategic Innovation Fund project in partnership with UK National Physical Laboratory and Scottish & Southern Electricity Networks Transmission.

Dr. Yue Zhu's personal website: <https://www.yuezhu.site>

About CityUHK

Located in the heart of Hong Kong, City University of Hong Kong (CityUHK) has a well-earned reputation as an innovative hub for research and professional education and for addressing global issues and empowering positive change. CityUHK is ranked 62nd in the 2025 QS World University Rankings and 10th in the 2025 QS Asia University Rankings. Electrical Engineering is recognized as an area of strength at CityUHK in terms of international competitiveness. The EE Department is a leader in power electronics and power systems, renewable energy, AI/ML, communications and smart technologies. It is ranked 1st in Hong Kong and top 100 worldwide in many ranking systems.