

Ph.D. Positions in Computational Mechanics

Two fully funded PhD positions in Computational Mechanics are available in the research group of new Assistant Professor [Dr. Tianju Xue](#) in the Department of Civil and Environmental Engineering at the Hong Kong University of Science and Technology (HKUST). ***The positions will focus on developing machine-learning-informed computational methods to solve emerging engineering problems, particularly in the field of additive manufacturing or construction.*** The expected start date is **February 2024** or **September 2024**.

Qualification required:

- Must hold a bachelor's or master's degree in civil/mechanical engineering, computer science, or a related field.
- Strong interest in programming (preferably Python).
- Experience with solid mechanics and finite element method.

About the PI and group:

After obtaining his Ph.D. from Princeton University, Dr. Xue was trained at Northwestern University as a postdoc researcher for 1.5 years and then joined HKUST. The group will focus on developing efficient methods applicable to challenging problems in computational science. The group also has a strong interest in developing high-performance open-source software that could potentially benefit the community. For example, check out our recently developed open-source software [JAX-AM](#) (>140 Github stars) that the PI has led in development, which performs differentiable simulation for additive manufacturing.

About HKUST and Postgraduate Studentship:

Established in 1991, the Hong Kong University of Science and Technology (HKUST) is a world-class international research university dedicated to cutting-edge education and research. Situated at the seafront, HKUST is also widely known as one of the most beautiful campuses in the world. HKUST is ranked #40 in QS World University Ranking and the Civil & Structural Engineering is named #20 among world's top universities.

The Postgraduate Studentship is about HK\$18,030 per month. Excellent PhD candidates will also be recommended to apply for The Hong Kong PhD Fellowship Scheme ([HKPFS](#)), which offers a monthly stipend of HK\$27,100. Please note the start date for HKPFS awardees is September 2024.

Application Procedures

Interested candidates are encouraged to send your CV, unofficial transcripts, and 1-page research statement (including experience, interest, and fit for the research group), with subject "Prospective PhD Student - HKUST" to Prof. Tianju Xue (cetxue@ust.hk).