

Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/gs-2025004/>

PhD Position in Digital Twins for Wind Farm Flows (GS-2025004) – Group of Assoc. Prof. Vikrant Gupta

Description

The Mechanical Engineering (Robotics) Program (group of Vikrant Gupta) is looking for 1 PhD student to conduct high-quality research on computational fluid dynamics of wind farms.

Project Details

Wind energy is rapidly growing and is set to become a major player in the electricity market. The growing size of turbines and wind farms means that their interactions with atmospheric flows becomes two-way coupled with meso-scale and micro-scale coupling. The PhD candidate will work on developing CFD capabilities to simulate large wind turbines spanning several layers of the atmospheric boundary layers and operating in complex environment, such as on floating platforms in deep offshore regions. The candidate will work with team members to facilitate flow modelling and analysis towards development of layout and operation optimization of wind farms.

Keywords

Wind energy, Turbulence, CFD, low-order modelling.

Selection Criteria

- Master's degree (or equivalent) in Mechanical Engineering or related (essential)
- Strong background in at least one programming language (essential) and fortran, C++ (preferable)
- Strong background in partial differential and ordinary differential equations (essential)
- Strong interest in GPU computations and high-performance computing (desirable)
- Strong interest to work in team, and travel to Israel (essential)
- Good communication skills, good command of English (essential)
- Ability to author scientific reports and co-author scientific publications (essential)
- The candidates must fulfill the requirements for admission to the Technion Graduate School and need to comply with its regulations leading to the PhD/Master degree: <https://graduate.technion.ac.il/en/prospective-students/>

Application

- Application deadline: 31 May 2026
- Send required documents to: vikrant.gupta@gtiit.edu.cn
- Please click [here](#) for the details.

Contact

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Position

PhD

Program

Mechanical Engineering (Robotics)

Contact

Assoc. Prof. Vikrant Gupta

Email: vikrant.gupta@gtiit.edu.cn

Web Page Link

Application Deadline

31 May 2026

Date posted

December 22, 2025

Location

Guangdong Technion – Israel Institute of Technology (GTIIT), China & Technion-Israel Institute of Technology, Israel.

Fees & Finance

How to Apply

Web Page : <https://www.gtiit.edu.cn/en/viewStaff.aspx?staffNo=1290>