

Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/gs-2024010/>

Master (MSc) Position in Wind turbine wakes: flow analysis and modelling (GS-2024010) – Group of Assoc. Prof. Vikrant Gupta

Description

The Mechanical Engineering (Robotics) Program (group of Vikrant Gupta) is looking for a motivated M.Sc. candidate to conduct research on Wind turbine wakes. Contract duration: 2 years.

Project Details

Deployment of wind turbines is increasing worldwide. They are becoming larger, closely packed, and located in increasingly unexplored terrain. This project aims to analyse wind turbine wakes under varied atmospheric inflow conditions and operating conditions of the wind turbine. The output of the work will be the basis to develop GPU-accelerated CFD solver for wind farms that can aid wind farm design, calculate wake effects and assist dynamic control.

The student will work in collaboration with other team members and have access to research facilities at Guangdong Technion and Technion-IIT, Israel. There will be collaboration opportunities with the fastest growing wind industry for which Shantou has emerged as a hub. International students are welcome. The tuition will be fully covered, and a generous stipend is offered (per month RMB 4000 in Shantou and \$ 1410 in Haifa). The degree is from Technion – Israel Institute of Technology, which is among the most reputed universities in the world, and we maintain the same qualification standards at Guangdong Technion.

Keywords

Wind energy, Turbulence, Computational Fluid Dynamics, Dynamical systems.

Selection Criteria

- Bachelor's degree in Engineering or Science (essential)
- Basic understanding of fluid mechanics and numerical methods (essential)
- Experience in CFD (desirable)
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in a team environment (essential)
- Ability to author scientific reports and co-author scientific publications (desirable)
- The MSc candidate must fulfill the requirements for admission to the Technion Graduate School and needs to comply with its regulations leading to the MSc degree: <https://graduate.technion.ac.il/en/prospective-students/>

Application:

- Application deadline: 31 December 2024 (full consideration), 28 February 2025
- Send required documents electronically to: vikrant.gupta@gtiit.edu.cn

Contact

Assoc. Prof. Vikrant Gupta

Phone: +86 (754) 8807 7226

Position

Master

Program

Mechanical Engineering (Robotics)

Contact

Assoc. Prof. Vikrant Gupta

Email: vikrant.gupta@gtiit.edu.cn

[Web Page Link](#)

Date posted

November 11, 2024

Location

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

[Fees & Finance](#)

[How to Apply](#)

Email: vikrant.gupta@gtiit.edu.cn

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