Research, Informatics and Graduate Studies

Master (MSc) Position in Deep Learning for Time Series Forecasting (GS-2024009) – 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 deep learning for forecasting chaotic systems from time-series data. Contract duration: 2 years.

Project Details
The study of fluid mechanics is undergoing a transformation due to recent advancements in measurement techniques and computational power. Data-driven methods can now be utilised to forecast increasingly complex turbulent flows. This project will explore the power of deep learning frameworks such as transformer and LSTM for forecasting complex dynamical systems. The project will particularly focus on the relation between the system dynamics and effectiveness of AI.

The student will work in collaboration with other team members and have access to research facilities at GTIIT and Technion. The student will be trained in big data and state-of-the-art computational tools. 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 GTIIT.

Keywords
Deep learning, Time-series forecasting, chaos, dynamical systems

Selection Criteria

- Bachelor's degree in Engineering or Science (essential)
- Basic understanding of the deep learning networks and dynamical systems (essential)
- Experience in time-series forecasting (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 candidate must fulfill the requirements for admission to the Technion Graduate School and needs to comply with its regulations leading to the PhD degree: https://graduate.technion.ac.il/en/prospective-students/

Application:

- Application deadline: 31 December 2024 (full consideration), 31 May 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

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September 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