

# Research, Informatics and Graduate Studies

<https://sites.gtiit.edu.cn/research/positions/gs-2022001/>

## PhD/Master (MSc) Positions in 3D printed medical devices (GS-2022001) – Group of Assoc. Prof. Zhujiang Wang

### Description

The Mechanical Engineering and Robotics Program (group of Zhujiang Wang) is looking for one PhD and two Master students to conduct research projects in lightweight lattice structures related to 3D printed medical devices.

### Project Details

Modern additive manufacturing technology allows fabricating lattice structures with complex topologies, and such structures have been applied widely in aerospace engineering and biomedical engineering etc. For the applications of lattice structures in biomedical engineering, designing graded lattice structures with desired properties is challenging. Our group develops automatic lightweight lattice structure generation methods (ALLSGM) and exploring the application of the ALLSGM in fabricating 3D printed medical devices, such as 3D printed shoe soles for caring diabetic foot ulcers, 3D printed bone scaffolds and implants, etc.

### Keywords

Additive manufacturing; lattice structures; finite element analysis; 3D printed medical devices; personalized medical devices; 3D printed shoes; 3D printed implants; 3D printed bone scaffolds

### Selection Criteria

- Master / Bachelor degree in Mechanical Engineering, Material Science, Manufacturing Engineering, Physics, or equivalent (essential)
- Strong programming skills and experience in C/C++, and/or Python (essential)
- Strong interest / experience in parallel computing, GPU programming (essential)
- Strong interest in finite element analysis / numerical analysis (preferable)
- Strong interest / experience in additive manufacturing (essential)
- Strong interest / experience in 3D CAD (preferable)
- Experience in mechatronics (preferable)
- Good communication skills, good command of English (essential)
- Ability to work independently as well as in an interdisciplinary team environment (essential)
- Ability to author scientific reports and co-author scientific publications (essential)
- The PhD candidate must fulfill the requirements for admission to the Technion Graduate School and needs to comply with its regulations leading to the PhD/Master degree: <https://graduate.technion.ac.il/en/prospective-students/>

### Application

Send required documents electronically to: [zhujiang.wang@gtiit.edu.cn](mailto:zhujiang.wang@gtiit.edu.cn) with the subject of "Application for the PhD/Master position 2022"

### Position

PhD/Master

### Program

Mechanical Engineering (Robotics)

### Contact

Assoc. Prof. Zhujiang Wang

Email: [zhujiang.wang@gtiit.edu.cn](mailto:zhujiang.wang@gtiit.edu.cn)

[Web Page Link](#)

### Application Deadline

Open till filled

### Date posted

January 24, 2022

### Location

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

### Fees & Finance

How to Apply