

# Ruowen Liu

Tampere, Finland

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## EDUCATION

### Tampere University

B.Sc. (Tech.), Computing and Electrical Engineering — GPA: 5.0/5.0 Tampere, Finland

- Major in **Software Development**.
- Minor in Applied Mathematics.
- **Key courses:** Database Basics (DATA.DB.100), Programming 3: Interfaces (COMP.CS.115), Data Structures and Algorithms 1 (COMP.CS.300), Introduction to Full Stack Development (COMP.CS.500), Computer Architecture (COMP.CE.130).

Aug. 2024 – Jun. 2026 (expected)

### Huaqiao University

B.Sc., Applied Physics — GPA: 3.5/5.0 Fujian, China

Sep. 2018 – Jun. 2022

- **Key courses:** Mechanics, Electromagnetism, Optics, Computational Physics, Programming with MATLAB, Advanced Mathematics, Information Technology Application, Literature Search and Scientific Paper Writing, Computer Language and Practice Algorithms (Software).

## EXPERIENCE

### Research Training – DataOps & Software Engineering

Tutored by Dr. Sergio Moreschini, Tampere University Tampere, Finland

Nov. 2025 – Present

- Investigated DataOps principles and their impact on Technical Debt in software systems under academic supervision.
- Conducted a systematic literature search across ACM, IEEE, Web of Science, and Scopus to identify and study DataOps practices.
- Traced and analysed published studies to their associated public GitHub repositories.
- **Keywords:** DataOps, Technical Debt, Software Engineering Research, Literature Review, Repository Analysis.

### Jira Bug Report Assistant

Software Engineering Project (COMP.SE.610) — Tampere University Tampere, Finland

Sep. 2025 – Dec. 2025

- Developed an AI-assisted Jira plugin using **Atlassian Forge** to provide real-time quality feedback on issue descriptions.
- Implemented project page and issue panel modules with **Custom UI (React)**.
- Integrated OpenAI API for automated error detection, severity scoring, and natural-language improvement suggestions.
- Collaborated with industry partners (Solita Oy.) and delivered MVP with successful on-site installation and testing.
- **Tech stack:** Forge, React, Node.js, OpenAI API, Atlassian REST API.

### A Simple Device for Observing the World in Droplets

Bachelor's Thesis — Huaqiao University Fujian, China

Dec. 8, 2021 – May. 18, 2022

- Score: 94/100 (Excellent(A))
- Designed and built a low-cost laser projection microscopy system using a laser pointer and water droplets to magnify and visualize microbial structures.
- Developed and applied **MATLAB-based motion-tracking algorithms** that automatically captured and analyzed the swimming trajectories of microorganisms from video frames.
- **Keywords:** Laser Projection Microscopy, Optical Diffraction, Microbial Imaging, Water Quality Analysis, Video Data Processing.

## TECHNICAL SKILLS

**Programming:** Python, C, C++, JavaScript, MySQL, MATLAB

**Web & Tools:** HTML/CSS, React, Node.js, basic full-stack development, Git, Atlassian Forge

**Domains:** Algorithms and data structures, software development, data analysis with Python, comprehensive physics background

## AWARDS AND SCHOLARSHIPS

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### Tampere University Tuition Fee Scholarship

*100% tuition fee waiver*

- Merit-based scholarship awarded for excellent academic performance and study potential.

Tampere, Finland

*Aug. 2024 – Present*

## EXTRACURRICULAR ACTIVITIES

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### Debate Team Captain

*Huaqiao University*

Fujian, China

*Sep. 2019 – Jun. 2022*

- Led the university debate team to **1 championship, 1 runner-up, and 2 third-place** finishes in regional competitions.
- Received multiple “Best Debater” awards for outstanding performance in formal debate tournaments.

### Science Popularisation Volunteer

*Xiamen Science & Technology Museum*

Fujian, China

*Aug. 2018 – Jan. 2021*

- Contributed over **100 volunteer hours**, assisting visitors and explaining scientific concepts in public outreach events.

## LANGUAGE SKILLS

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**Chinese:** Native

**English:** IELTS 6.5 (Writing 6.5), certified Apr. 8, 2023

**Finnish:** CEFR A2.1 (Finnish 4, LANG.SUV.004)