

Jierui Li

jieruili@andrew.cmu.edu | (412) 559-4901
www.linkedin.com/in/jierui-li-384b39234

EDUCATION

Carnegie Mellon University

Carnegie Institute of Technology

- M.S. in Mechanical Engineering – Robotics and Control Concentration | GPA: 4.0/4.0
- Core Courses: Computer Vision for Engineers, Introduction to Deep Learning, Natural Language Processing

Pittsburgh, PA

Aug 2023 - Present

University of Pittsburgh

Swanson School of Engineering

- B.S. in Mechanical Engineering | GPA: 3.901/4.0
- Honor: Summa Cum Laude*

Pittsburgh, PA

Aug 2021 - Apr 2023

Sichuan University

Sichuan University - Pittsburgh Institute

- B.E. in Mechanical Engineering | GPA: 3.51/4.0

Chengdu, China

Aug 2021 - Apr 2023

SKILLS

3D Modeling: SolidWorks, Ansys, CATIA

Programming: Python, C/C++, MATLAB, Java

Framework: PyTorch, Numpy, OpenCV, Scikit-learn

WORK EXPERIENCE

Carnegie Mellon University

Course Assistant for Artificial Intelligence and Machine Learning Course

- Grade assignments and code submissions
- Address student questions regarding assignments

Pittsburgh, PA

Aug 2024 - Present

ENN Energy Holdings Limited

Assistant Test Engineer Intern

- Calculated rotor imbalance and imbalance mass under various balance grades, based on collected data
- Investigated vibration spectrum analysis of micro gas turbine core engine using collected vibration data

Langfang, China

Jul 2023 - Aug 2023

PROJECTS

Material Grade-Based Task Planning for Robotic Limestone Mining

Sep 2023 - Present

Research Assistant in Computational Engineering & Robotics Lab, Carnegie Mellon University

- Develop and implement algorithms to optimize digging points and mining vehicle routes for enhanced ore collection efficiency
- Utilize Monte Carlo Tree Search combine with Transformer models, to optimize ore grade selection and minimize transportation costs
- Actively optimizing reward functions and models, aiming to achieve 85-90% of the optimal solution while significantly reducing search times

Design and Assembly of Hydrogel Fatigue Tester

May 2022 - Sep 2022

Research Assistant in Prof. Qihan Liu's group, University of Pittsburgh

- Developed fatigue tester with linear movement engine instead of standard circular movement engine for pulling material up and down to stretch and compress it
- Responsible for designing transmission structure and stress calculation
- Assembled and examined tester to minimize impact of manual errors on measurement results

EXTRACURRICULAR ACTIVITIES

Service: PHI ETA SIGMA National Honor Society

Oct. 2022 - Present

Leadership: English Association of Sichuan University coordinator/events organizer

April. 2020 - Jul. 2021