

# LUJIE(SUE) ZHAO

Tel: (+1) 203-645-6716

Email: [lujie.sue.zhao@gmail.com](mailto:lujie.sue.zhao@gmail.com)

LinkedIn: [www.linkedin.com/in/lujie-sue-zhao](http://www.linkedin.com/in/lujie-sue-zhao)

## EDUCATION

New York University, Tandon School of Engineering

B.S. in Computer Science, Minors in Finance and Business Studies

GPA: 3.75/4.00

New York, NY, Sep. 2018 - *Present*

Expected graduation in May 2022

## EXPERIENCE

New York University, Tandon School of Engineering

New York, NY

Teaching Assistant, Research & Development Committee, General Engineering 1003 Course

Aug. 2019 – *Present*

- ◆ Redesign the course and build **C++** library for new VEX semester-long design project Mars Rover Robot. Mentor Rapid Assembly & Design projects while providing technical assistance. Teach first year students basic engineering concepts through various laboratory experiments.

New York University, AI4CE Lab

New York, NY

Research Intern, Large Scale Mobile Robot 3D Printing with Prof. Chen Feng

June 2019 – Aug. 2019

- ◆ **Image Process using OpenCV**: Developed **Python** algorithms for image detection and path planning for single mobile robot to print in 2D.
- ◆ **Revit Modeling and Gazebo Simulation**: Modified two mobile robots in real world and modeled them accordingly in **Revit**. Built **Gazebo** simulated environment and collected training data (~7500 images) for future machine learning process.
- ◆ **Robot Operating System Implementation**: Implemented **ROS** to the two robots. Calibrated them to run successfully and drew a 2D floor plan on a wood board (3m x 6m).

IFT Robotics

Beijing, China

Teacher & Coach

June 2018 – Aug. 2018

- ◆ IFT Robotics is a robotics education institution found based on VEX U robotics team IFT. It offers robotics courses to primary and secondary school students and leads them to compete in VEX IQ and VEX EDR competitions. IFT Robotics locates in Beijing with a branch in Xi'an, China.
- ◆ Taught middle school students robotics courses and held practice competitions. Coached in 2018 World Robot Conference in Wuhan, China. Coached team won the **1<sup>st</sup>** place in middle school division.

## HONORS & AWARDS

VEX U World Championship

Louisville, KY

- ◆ **2019 VEX U World Champion**: Team ranked **first** out of 77 teams from 13 different countries and regions.
- ◆ **2018 VEX U World Finalists**: Team ranked **second** out of 83 teams from 13 different countries and regions.
- ◆ **2017 VEX U World Finalists**: Team ranked **second** out of 62 teams from 13 different countries and regions.

## ACTIVITIES

NYU Self Drive, Perception Sub-Team Member

New York, NY, Sep. 2019 - *Present*

- ◆ Use computer vision (PyTorch) to develop algorithms for an autonomous self-driving mini car. Attend weekly meetings and lectures.

Poly Programming Team, Member

New York, NY, Sep. 2019 - *Present*

- ◆ Engage in team activities and contribute in weekly practice for annual ACM-ICPC regional contest.

VEX U Robotics Team IFT, Co-captain & Founder

Various Locations, Dec. 2015 – May 2019

- ◆ Co-founded Team IFT with friends across different high schools and competed in VEX University division; Voted the co-captain of the team.
- ◆ Recruited college (RPI, Penn State, Trinity, etc.) students and helped founded IFT Robotics.
- ◆ Worked as the main programmer in the team and participated in regional, national competitions and World Championship with members.

## SKILLS

- ◆ Programming Languages: Python, C++, Java, HTML, CSS, JavaScript
- ◆ Softwares & Tools: Arduino IDE, Microsoft Office, Tableau, Final Cut Pro, Adobe Photoshop, Adobe Illustrator, Adobe Audition, After Effects