LUJIE(SUE) ZHAO

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EDUCATION

New York University, Tandon School of Engineering   **Brooklyn, NY,** Sep. 2018 – *Present*

B.S. in Computer Science, Minors in Mathematics and Finance   Expected graduation in **Dec 2021**

GPA: **3.77/4.00**

EXPERIENCES

Google Inc., Google Cloud Core Infrastructure   **Sunnyvale, CA** (Virtual)

STEP (Student Training in Engineering Program) Intern, CDPush Team   June. 2020 – Sep. 2020

- **Implementation of Internal Pages:** Recreate pages of CDPush for the current system for directory, one-push, and all pushes.
- **Visualization of Dynamic Configuration Pushes:** Build visual elements for the internal web UI. Show the timeline of all pushes and the relationship between the current and previous pushes; help users understand the process of the push and estimate the completion time.
- Front-end development using **TypeScript** with **Angular** framework, Sass and Protocal Buffers.

New York University, Tandon School of Engineering   **Brooklyn, 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   **Brooklyn, NY**

Research Intern, Large Scale Mobile Robot 3D Printing with Prof. Chen Feng   June 2019 – Aug. 2019

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

IFT Robotics   **Beijing, China**

Teacher & Coach   June 2018 – Aug. 2018

- IFT Robotics is a robotics education institution for primary and secondary school students based on VEX U robotics team IFT.
- Taught middle school students robotics courses and held practice competitions. Coached in the 2018 World Robot Conference. The coached team won 1st place in VEX 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   **Brooklyn, 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   **Brooklyn, NY,** Sep. 2019 – *Present*

- Contribute in weekly practice for the annual ACM-ICPC regional contest and engage in team activities.

VEX U Robotics Team IFT, Co-captain & Founder   **Various Locations,** Dec. 2015 – Apr. 2019

- Co-founded Team IFT with friends across different high schools and competed in VEX university division. Voted the co-captain of the team and recruited students from different colleges (RPI, Penn State, Trinity, etc).
- Worked as the main programmer in the team. Led the team in regional, national competitions and World Championship.
- Helped founded robotics education institution IFT Robotics located in Beijing with a branch in Xi'an, China.

SKILLS

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