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## WORK EXPERIENCE / LEADERSHIP

### Huawei Technologies | Deep Learning Research Engineer Intern

May 2019 - Aug 2019

- Wireless communications team
- Utilized generative models for 5G Technologies and wireless applications
- Worked with models such as Normalizing Flows and Variational Autoencoders

### Robokids Richmond, B.C., And Vancouver, B.C | Robotics Instructor

June 2018 - Aug 2018

- Educated over 30 students on programming concepts using Scratch, Lego Mindstorm, VEX IQ

### University of Toronto's Robotics Association | Sponsorships & Finance Director

Dec 2018 - Current

- Led the sponsorships team to organize **UltraHacks** to accommodate over 250 students in the event
- Acquired sponsorship from Solidworks, Particle, Leapmotion, Nvidia totaling over \$4000 in value

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## PROJECTS / COMPETITIONS

### TurnDownForWhat | React-native App at TreeHacks (Stanford University)

Feb 2018

- Detected movement using the **smartphone accelerometer** to lower music volume when falling asleep
- Interfaced the back-end with **React-Native** with **HTML 5** and hosted on **Expo.io**
- Architected a **Node.js** server to convert **form data** voice input to **streams** to integrate **Houndify** and **Expo.io**

### EtherRide | Blockchain Car Rental at UofTHacks VI (University of Toronto)

Jan 2019

- Received the **Best Aragon App** by ChainSafe award out of 102 team submissions
- Developed two **React.js** apps to communicate with the **Aragon API** and **SmartCar API**
- Monitored back-end **Solidity smart contracts** using **Ethers.js** and interfaced with SmartCar through **HTTP**

### Personal Website | URL: [yuxuanyyx.com](http://yuxuanyyx.com)

Dec 2018 - Current

- Designed and implemented the interface using **React.js**
- Utilized React's state, props, and event handling to enable **parallax scrolling** and on-scroll animation
- Deployed the website using **Heroku** and linked with an individual domain

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### Avacancy | Computer Vision at HackPrinceton (Princeton University)

Nov 2018

- Processed video footage of parking lot surveillance camera through **perspective transform** and **binarization**
- Utilized **openCV** to identify locations of vacant parking space within video footage
- Converted data into parking space map for **real-time** representation of parking availability

### Autonomous Robot | SUMO competition

Oct 2017 - Apr 2018

- Placed **first out of 40 teams** entered in the competition
- Designed an **Arduino** algorithm by employing ultrasonic sensors to increase detection range to 4m

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## TECHNICAL SKILLS

**Programming Languages** C/C++, Python, MATLAB, Arduino, Bash, Swift

**Web Development** HTML/CSS/Javascript, JSX, Django, Flask, MongoDB, Node.js, React.js

**Others** Git, Linux, Scikit-learn, Keras, OpenCV, Verilog HDL, Solidity, MS Office

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## EDUCATION / AWARDS

### BASc in Computer Engineering (2nd Year) | University of Toronto

Sep 2017 - Apr 2021

- **CGPA:** 3.52 / 4.0
- **Awards:** B.C. Achievement Scholarship, National AP Scholar (Canada)
- **Dean's List Award:** Fall '17, Winter '18, Fall '18