

Alex Yang

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EDUCATION

- **Georgia Institute of Technology** Atlanta, GA
Bachelor of Science - Computer Science; GPA: 4.00 August 2019 – Present
Relevant Coursework: Data Structures and Algorithms for Applications, Objects and Design, Computer Organization and Programming, System and Networks, Intro to Artificial Intelligence, Digital Design Lab, Intro to Multivariable Calculus, Probability and Statistics with Applications, Applied Combinatorics

SKILLS

- **Programming:** Java, Python, C, C++, SQL, JavaScript, Swift
- **Framework:** Spark, React, React Native, Angular
- **Tools:** Xcode, Android Studio, IntelliJ, Autodesk Inventor, SolidWorks, Adobe Creative Suite
- **Hardware:** Arduino, Raspberry Pi, FPGA Board Circuit Design
- **Language:** Chinese (bilingual), English (bilingual), Japanese (intermediate)
- **Communication:** Presentations, Research papers, Email, Lab reports, Visual graphs/charts

EXPERIENCE

- **Georgia Institute of Technology** Atlanta, GA
Undergraduate Research Assistant (School of Computational Science and Engineering) Sep 2020 – Present
 - Working on Cardiac AR, a research project in cooperation with Children's Hospital of Atlanta aiming at building an iOS application based on ARKit to assist surgeons with surgical planning in an augmented reality environment.
 - Working on Argo-Lite, an interactive web graph visualization and exploration tool based on React framework. Currently used by over 1,000 students in CSE 6242 / CX4242 (Data and Visual Analytics) at Georgia Tech.
- **TripUCan** Atlanta, GA
Cofounder & Front-end Lead May 2020 – Present
 - Developed and implemented views/templates on top of React Native's JavaScript framework.
 - Created and maintained the front-end standards document and oversaw production of JavaScript, HTML, and connection to server.
- **CityLift Parking** Oakland, CA
Software Engineering Intern Oct 2018 – May 2019
 - Designed Android application and user interface showcasing the mechanism of the automated car parking system.
 - Conducted research on new linear lift design based on CAD modeling to improve its performance and efficiency

PROJECTS

- **Universal Drone Controller - A new input method of controlling and monitoring UAVs based on Leap Motion hand gesture recognition:**
 - Using DJI Mobile Developer SDK to extract class files instance fields and methods related to flight control data from the drone. The fields include the aircraft principal axes (pitch, roll, yaw) and x, y, z coordinates in 3-D system.
 - Vision processing is built using Python, and the SDK is connected to the LeapMotion input through a Web Server/HTTP with Spark Java Framework.
 - **Tech:** LeapMotion, DJI Mobile SDK, Spark, Web Server

EXTRACURRICULAR ACTIVITIES

- **Billiards @ Georgia Tech** Atlanta, GA
Founder & Vice President Sep 2019 – Present
 - Designed and published online ranking server for on-campus competitive matchmaking system.
 - Organize weekly and monthly tournaments among club members.
- **RoboJackets** Atlanta, GA
Firmware Lead August 2019 – May 2020
 - Designed and modified firmware program for Sumo Robot in Robowrestling tournament