CATHERINE LEE

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EDUCATION

- **Georgia Institute of Technology**   Expected Graduation: May 2021
  Bachelor of Science in Computer Science   *Atlanta, GA*

PROGRAMMING SKILLS

- **Languages**: Java, Javascript, HTML/CSS, C, Python, Kotlin   **Technologies**: Node.js, D3.js, React, Firebase, Git

EXPERIENCE

- **Georgia Institute of Technology RoboSense**   Jan 2020 - Present
  Research Team   *Atlanta, GA*
  - Engineer miniature robotic blimps and autonomous underwater vehicles for environmental monitoring, security surveillance, sensing networks, and human-robot interaction.
  - Prototype and test new PCB designs to improve onboard computation and onboard perception.
  - Utilize **ROS** (Robot Operating System) to trigger and test robotic blimp models.
- **Capital One**   June 2020 - Aug 2020
  Software Engineer Intern   *Richmond, VA*
  - Worked with **React, Redux, Express, Node.js,** and **Google Cloud Platform** to create an internal full-stack web application that allows developers to request access to Google Suite APIs.
  - Designed and built data visualization analytics dashboard with **D3.js** and **React** to produce dynamic, interactive graphs and animations.
  - Improved admin approval flow, allowing a faster, more transparent process/communication between requesters and admins.
- **UPS**   May 2019 - Aug 2019
  Application Developer Intern   *Alpharetta, GA*
  - Designed and built Android app that acted as a central hub for warehouse employees to easily transition from warehouse roles (e.g. scanning, printing labels) to shipment roles (e.g. navigation, routing order).
  - Developed in **Kotlin** and **XML** with Android SDK using Android Studios.
  - Replaced outdated NGSS scanner module with a concise, efficient app on the new Zebra TC25.

PROJECTS

- **Safe-T**   June 2019
  Warehouse technology that alerts users of current or potential safety violations
  - Trained application model using IBM Watson Studio to identify live safety violation.
  - Integrated machine learning model with iOS's camera functionality written in **Swift**.
- **Magic Mirror**   Sept 2018 - Feb 2019
  Open source modular smart mirror platform
  - Contributed to open source custom module on Magic Mirror's plugin system.
  - Integrated **JavaScript** module with **Raspberry Pi** hardware and **Linux OS** to support Amazon's Alexa API.
- **Water We Donating**   Aug 2018 - Dec 2018
  Android application that assists non-profit organization with tracking donations and distributions
  - Developed application in **Java** and **XML** with Android SDK with Firebase implantation and Google Play Services
  - Additionally acted as project manager for small team using agile/scrum.

INVOLVEMENT

- **The Hive Makerspace**   June 2020 - Present
  Peer Instructor
  - Assist and teach Georgia Tech students about the makerspace's equipment (e.g. **laser cutter, 3D printer, machine shop, circuitry/electronics workbench**).
  - Enforce machinery safety procedures and regulations.
- **HackGT**   Nov 2018 - Present
  Organizer, Curriculum Writer
  - Responsible for event logistics (e.g. workshops, expo, food) for 501(c)(3) nonprofit organization, organizing nation-wide collegiate hackathons of upwards of 1000 students to small-scale, local hackathons and workshops.
  - Create and coordinate Hardware Curriculum (i.e. **Raspberry Pi, Arduino, circuits**) for Catalyst, an event to promote STEM directed towards under-represented, under-served Atlanta high school students each year.
  - Outreach and promote computer science education, impacting 1,500+ high school and college students yearly.