

Katharine (Katie) Wang

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EDUCATION

Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science

Aug. 2023 - May 2027 (Expected)

- 3.85 GPA
- Completed Courses: Differential, Integral, and Multivariable Calculus, Linear Algebra, Honors Introduction to Discrete Math, Introduction to Object Oriented Programming
- Current Courses: Data Structures & Algorithms, Computer Organization & Programming, Objects & Design

Peachtree Ridge High School

Suwanee, GA

Salutatorian (2/800 students)

Aug. 2019 - May 2023

- School STAR Student, National Merit Scholarship Finalist, 2022 National Cyber Scholarship Scholar, 2022 NCWIT Regional Award for Aspirations in Computing

LEADERSHIP/EXTRACURRICULARS

FIRST Robotics Competition

Aug. 2019 - Present

Referee/Team Captain/Programming Lead/Drive Team Technician

- Won Innovation In Control Regional Award in 2022 and 2023, Autonomous Award in 2023
- Developed a custom state machine framework to better organize code
- Implemented closed-loop PID motor control to reduce position and velocity error during autonomous movement
- Applied vision tracking with April Tags and Limelight to autonomously align robot to target
- Volunteered with Georgia FIRST website redesign team: utilized Next.js to prototype, presented to Board of Directors weekly, improved navigation and design

Viasat, Inc.

Sep. 2022 - Dec. 2022

Mechanical Engineering Intern

- 3D printed SOLIDWORKS CAD of prime focus feed with self-designed brackets that allowed height adjustment
- Collaborated with other interns to complete Certified SOLIDWORKS Associate practice problems
- Learned about basics of antenna design and observed oscilloscope during torque test

CodeHers Collective

May 2019 - May 2023

Content Lead/Instructor/Volunteer

- Led the design of 7 lessons about coding languages and computer science concepts over 150 volunteer hours
- Instructed in Zoom over 100 middle and high-school girls
- Led in-person web development summer camp for 10 middle-school girls in the metro-Atlanta area
- Co-organized CodeHers hackathon with workshops for over 150 girls to create games, apps, and websites

PROJECTS

EnviroMap | *React Native, TypeScript, Expo, npm, FireBase, Google Cloud Platform*

Nov. 2020 - Feb. 2021

- Developed a gamified Expo mobile app to calculate carbon footprint and offset emissions by trading carbon credits
- Implemented Firebase authentication and data storage
- Used Google Maps API, React Native Geocoding, and React Native Maps Directions to calculate distance driven
- Plugged calculated distance into EPA formula to derive emissions
- Won 1st place in Systems Software Category at Gwinnett Science Fair with \$500 grant

Packing-Coloring | *Java, JavaFX*

Sep. 2023 - Dec. 2023

- Co-developed a program that outputs a packing-coloring grid for a user-specified dimension using a backtracking algorithm and discrete math
- Wrote IEEE paper exploring the packing coloring problem, an existing proof method, and applications of SAT-solvers

TECHNICAL SKILLS

Languages: (proficient): Java, HTML/CSS (familiar): Python, JavaScript, Swift

Frameworks: React Native, Next.js

Developer Tools: Git, Google Cloud Platform, Expo, npm, VS Code, Eclipse

Libraries: React.js