# Katharine (Katie) Wang

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## EDUCATION

**Georgia Institute of Technology** — Atlanta, GA
*Bachelor of Science in Computer Science - 3.91 GPA* — *Aug. 2023 - May 2027 (Expected)*
- Activities: Georgia Tech Solar Racing Team, First-Year Activities Board

## EXPERIENCE

**Google, Inc.** — *May 2024 – Aug. 2024*
*STEP Intern*
- Engineering full-stack for Google TV row that allows 150+ million users to browse content organized by genre
- Optimized TV's most-used browsing journey, reducing clicks by 50% to simplify content discovery for users
- Completed entire development process: co-authored a design doc, presented to 24 TV FTEs during design review, implemented feature using Java, Kotlin, and Android Studio, and demoed for team
- Collaborated closely with another intern to complete initial requirements in 1 month and progress on stretch goals
- Conducted unit and integration testing to prevent post-release bugs, resulting in 95% code coverage

**FIRST Robotics Competition** — *Aug. 2019 – Apr. 2024*
*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 in Java 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

**CodeHers Collective** — *May 2019 – May 2023*
*Content Lead/Instructor/Volunteer*
- Led the design of 7 lessons: Java, Python, Unity, HTML/CSS/JS, React Native, GitHub, and Scratch
- Instructed in Zoom over 100 middle and high-school girls, committing over 150 volunteer hours
- 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

**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 research paper exploring the packing-coloring problem, an existing proof method, and applications of SAT-solvers

**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
- Won 1st place in Systems Software Category at Gwinnett Science Fair with $500 grant

## TECHNICAL SKILLS

**Languages**: (proficient): Java, HTML/CSS (familiar): C, JavaScript, Python, Swift
**Frameworks**: JUnit, React Native, Next.js
**Developer Tools**: Git, Android Studio, Docker, Google Cloud Platform, Expo, npm, VS Code, Eclipse
**Libraries**: React.js