

# Kate Li

Atlanta, Georgia 30322 • kli605@gatech.edu • (404) 585-0125 • LinkedIn: li-kate

## EDUCATION

**Georgia Institute of Technology**, Atlanta, Georgia

May 2028

*Bachelor of Science in Computer Science*

GPA: 4.0/4.0

- **Relevant Coursework:** Discrete Mathematics, Object-Oriented Programming, Computing, Statistics and Applications, Linear Algebra, Multivariable Calculus, Data Structures and Algorithms (Spring 2025), Database Systems (Spring 2025), Computer Organization and Programming (Spring 2025)

## PROGRAMMING SKILLS

**Programming/Scripting Languages:** Java, Python, JavaScript, C++, HTML, CSS, C#, Google Apps Script

**Frameworks and Tools:** Git, GitHub, Microsoft Office, Google Suite

## EXPERIENCE

**Vice President at Techno Titans FIRST Robotics Competition Team**, Johns Creek, GA

Aug 2020 – May 2024

- Led a team to create Tower Defense and platform type mobile games geared toward the annual theme using the game engine Unity
- Introduced new data collecting and visualization techniques to the team, significantly increasing efficiency in data analysis and strategic decision-making
- Automated spreadsheets with JavaScript to transform large amounts of competition data to visualizations, web scrape using REST API, and involve non-experienced members or other teams through inclusive user experience
- Negotiated with other teams on the strategy of the game, determining which team gets which role in the competition
- Taught new members Java, JavaScript, HTML, CSS, GitHub, Git, Unity, and Romis (small robots)
- Member of mobile app team using React Native and Android Studio to collect data from competition
- Presented multiple times at Titan STEM Nights (teach elementary schoolers STEM with small projects)
- Organized social events for the girls on the team as well as providing mentorship, guidance, and advice

**Intern at Challenge Island**, Johns Creek, GA

Sep 2023 – Dec 2023

- Web-scraped and visualized data from the Georgia Department of Education database to look for potential customers
- Taught elementary school children STEM-based lessons, engaging them in fun activities

**Founder and Owner of ColumnsAndRowsShop**, Duluth, GA

Aug 2023 – Aug 2024

- Ran an Etsy online shop selling spreadsheets aimed toward helping students
- Utilized SEO optimization and advertising to market the shop
- Sold 60+ spreadsheets that are automated with JavaScript and Google Apps Script

## PROGRAMMING PROJECTS

**Arduino Competition Projects**

Aug 2022 – May 2024

- 1st at Science Olympiad Regional competition; built and programmed a force sensing resistor to make a mass-scale that accurately measures and displays the masses of different objects; tested on knowledge of electrical components, physics, code, and statistics
- 2nd at Science Olympiad Regional competition; built and programmed an oxidizing-reduction probe sensor to accurately measure and display the concentrations of NaCl in parts per million from 0 to 5000 ppm of different water samples as well as voltage

## COMMUNITY ENGAGEMENT AND LEADERSHIP EXPERIENCE

**FIRST Lego League and FIRST Tech Challenge Mentor**, Johns Creek, GA, Northview High School

Aug 2021 – May 2024

- Volunteered helping middle and elementary school students learn how to code (Java and Scratch) and build a Lego Mindstorm robot for competition
- Supervised a team on how to develop a mobile app with Scratch for the Innovation Award (won regional competition)
- Presented and organized the FIRST Lego League and OnShape CAD summer camps targeted to Middle Schoolers

**3DE Program**, Johns Creek, GA, Northview High School

Aug 2020 – May 2022

- Collaborated with large businesses to analyze and provide solutions to business-related problems such as employee turnover, advertising and marketing, and supply chain management
- Researched and analyzed data to brainstorm and determine the best solutions such as designing an augmented reality app for The Home Depot or a website to ease customer uncertainty for Delta
- Created professional presentations in PowerPoint and presented in front of representatives from those businesses
- Learned marketing and business concepts as well as soft skills such as communication, teamwork, and public speaking

## ADDITIONAL SKILLS AND INTERESTS

**Languages:** Intermediate proficiency in *French & Mandarin*    **Fine Arts:** Piano, Violin, Film, Videography, Creative Writing

**Interests:** Cartoons and Animations, Strategic Gaming, Hiking, Spreadsheets