

# Katherine Shen

katherineshen@gatech.edu

github.com/shenkw1  
+1 (443) 766-2382 – U.S. Citizen

## EDUCATION

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### Georgia Institute of Technology

*Bachelor's of Science in Computer Science, GPA: 3.73*

Atlanta, GA

*Aug 2020 – May 2024*

**Concentration:** Graphics & Networking

**Courses:** *Computer Networking*, Information Security, Information Visualization, Systems and Networks, Databases, Algorithm Design, Computer Graphics, Computer Architecture, Linear Algebra, Data Structures & Algorithms

## EXPERIENCE

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### Amazon Web Services

San Francisco, CA

*Software Development Intern - OpenSearch Ingestion*

*May 2023 – Aug 2023*

- Deployed advanced key value processor to production environments for use in AWS OpenSearch
- Improved data ingestion tool's capabilities to transform data by increasing data processing functionality
- Enhanced customer ability to collect observability data by expanding configurations for the key-value processor
- Implemented user options in Java to select key-value pairs, mutate values, and recursively parse input data

### Vertically Integrated Projects

Atlanta, GA

*Getting to Know U - Provost Data Dashboard Design*

*Aug 2022 – Dec 2023*

- Led subteam for large scale project to provide student body with information on classes, majors, clubs, etc.
- Managed and conducted code reviews for 8 engineers transitioning design wireframes to a user-friendly webapp
- Standardized design systems after rigorous UX audit of existing dashboard designs for future dataset visualization

### Georgia Tech Research Institute

Atlanta, GA

*Research Software Engineering Intern*

*May 2022 – May 2023*

- Spearheaded development of AI model visualization tool using React, Python, and custom data architecture
- Transitioned emergency procedure manual iPad application to React webpage with improved user experience
- Developed Python script to parse styling information from Excel sheet database in order to render on webpage

### Johns Hopkins University Applied Physics Lab

Laurel, MD

*Software Engineering Intern*

*Jun 2018 – Jun 2020*

- Reduced average time for locating parking spot on APL campus with OpenCV and image recognition
- Experimented with relationships between emotional context and television subtitles using NLP techniques
- Developed lost device tracking system with Raspberry Pi by building Pseudo-GPS system with WiFi networks

## EXTRACURRICULARS

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### GT Esports

Atlanta, GA

*Advisor, Vice President, Creative Department Head*

*Sep 2020 – May 2023*

- Boosted member engagement by leading initiatives to increase organization activity and school presence
- Led creative team to create a website, social media graphics, and game-specific designs
- Managed budget and allocated funds for competitive teams, various events, and organization costs

### GT Symphony Orchestra

Atlanta, GA

*Clarinetist, Bass Clarinetist*

*Aug 2021 – May 2022*

- Participated in weekly rehearsals and sectionals as one of two clarinetists in the highest level orchestra ensemble
- Collaborated with the conductor and fellow musicians to perform two to three concerts per semester

## SKILLS SUMMARY

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**Programming:** Python, Java, JavaScript, TypeScript, OpenGL, HTML/CSS, SQL, C,  $\text{\LaTeX}$ , Assembly

**Tools:** Figma, Notion, Trello, Git, Adobe Photoshop, Tableau

**Technologies:** React, D3.js, Websockets, API, Event Handling, Flask

**Languages:** English (native), Chinese (fluent), Korean (beginner)