# Katherine Shen

katherineshen@gatech.edu

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

### **EDUCATION**

### Georgia Institute of Technology

Atlanta, GA

Master's of Science in Computer Science – Human-Computer Interaction

Aug 2024 - May 2025

### Georgia Institute of Technology

Atlanta, GA

Bachelor's of Science in Computer Science, GPA: 3.62

Aug 2020 - May 2024

Concentration: Graphics & Networking

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

### EXPERIENCE

#### **Amazon Web Services**

San Francisco, CA

Software Development Intern - OpenSearch Ingestion

May 2023 - Aug 2023

- o Improved data ingestion tool's capabilities to enrich and transform data by increasing data processing functionality
- $\circ~$  Enhanced customer ability to collect observability data by expanding configurations for the key-value processor
- o Implemented user options to include or exclude 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 - Present

- 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
- o 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
- o 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
- o Developed lost device tracking system with Raspberry Pi by building Pseudo-GPS system with WiFi networks

### EXTRACURRICULARS

# 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
- o 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

### **PROJECTS**

# gamelettr | Python, Websockets, Event Handling, REST APIs

- Provided quick esports tournament lookup information for regional and global events through chat bot
- Developed a scheduler to deliver notifications with a stream link for upcoming matches for ease of viewing
- o Integrated with database to persist enduser team preferences, configurations, and enabled notifications

### SKILLS SUMMARY

Programming: Python, Java, JavaScript, TypeScript, OpenGL, HTML/CSS, SQL, C, LATEX, Assembly

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

**Technologies**: React, Websockets, API, Event Handling, Flask **Languages**: English (native), Chinese (fluent), Korean (beginner)