

Katherine Shen

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EDUCATION

Georgia Institute of Technology

Bachelor's of Science in Computer Science, Major GPA: 3.63

Atlanta, GA

Aug 2020 – May 2024

Concentration: Graphics & Systems Engineering/Networking

Courses: *Systems and Networks, Intro to Databases, Algorithm Design, Computer Graphics, Computer Architecture, Applied Combinatorics, Linear Algebra, Data Structures & Algorithms, Object-Oriented Programming*

EXPERIENCE

Amazon Web Services

Incoming Software Development Intern

East Palo Alto, CA

May 2023 – Aug 2023

Vertically Integrated Projects

Getting to Know U - Provost Data Dashboard Design

Atlanta, GA

Aug 2022 – Present

- o Analyzed Georgia Tech population distribution across different majors, credit hours, graduation rates, etc
- o Iterated and improved existing dashboard designs already in the provost system
- o Performed UX audits and built design systems to create dashboards for new datasets
- o Led the React subteam to successfully transition high fidelity wireframes into a webapp and implement user-friendly features

Georgia Tech Research Institute

Research Assistant

Atlanta, GA

Aug 2022 – May 2023

- o Transitioned emergency procedure manual iPad application to React webpage with newer features
- o Developed Python script to parse styling information from Excel sheet database in order to render on webpage
- o Enhanced user experience by adding features to allow for adding, removing, and editing of emergency manuals

Georgia Tech Research Institute

Research Software Engineering Intern

Atlanta, GA

May 2022 – Jul 2022

- o Assisted in identifying issues with user-uploaded ML models by developing an error analysis visualization tool
- o Iterated continuously on various dashboard designs and visualizations to maximize user experience with React
- o Designed data architecture to allow seamless communication with database in Flask and pandas

Johns Hopkins University Applied Physics Lab

Software Engineering Intern

Laurel, MD

Jun 2018 – Jun 2020

- o Reduced average time for locating parking spot on APL campus with OpenCV and image recognition
- o Dispatched analyzed parking spot data to drivers gathered through mobile app
- o 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

Advisor, Vice President, Creative Department Head, Treasurer

Atlanta, GA

Sep 2020 – Present

- o Restructured organization by interviewing/onboarding new staff and creating new procedures
- o Boosted and promoted member engagement by implementing policies to increase member participation
- o Managed creative team of 7 creating website, social media, and game-specific designs
- o Integrated creative department into game sub-organizations to produce ad-hoc graphics for large events
- o Managed budget and allocated funds for competitive teams, various events, and organization costs

PROJECTS

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

- o Provided quick tournament lookup information for regional and global events through Discord bot
- o Consumed Riot Games Esports API to get accurate, live tournament information
- o Utilized formatting algorithms with data structures to display information sent to Discord using `discord.py`
- o Developed a scheduler to deliver notifications with a stream link for upcoming matches for ease of viewing

SKILLS SUMMARY

Programming: Python, Java, JavaScript, TypeScript, OpenGL, HTML/CSS, SQL, C, \LaTeX , Assembly
Tools: Figma, Notion, Trello, Git, Adobe Photoshop, Tableau
Technologies: Websockets, API, Event Handling, React, Flask
Languages: English (native), Chinese (fluent)