Katherine Shen

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+1 (443) 766-2382 – U.S. Citizen

EDUCATION

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, Applied Combinatorics, Linear Algebra, Data Structures & Algorithms, Object-Orientated Programming

EXPERIENCE

Amazon Web Services — East Palo Alto, CA
Software Development Intern - OpenSearch Ingestion — *May 2023 – Aug 2023*
- Improved data ingestion tool's capabilities to enrich and transform data by increasing data processing functionality
- Enhanced customer ability to collect observability data by developing new configurations for the key-value processor
- 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*
- Analyzed Georgia Tech population distribution across different majors, credit hours, graduation rates, and more
- Iterated and improved pre-existing dashboard designs in the provost system
- Performed UX audits and built design systems to create dashboards for new datasets
- Led the React subteam to successfully transition high fidelity wireframes into a webapp and implement user-friendly features

Georgia Tech Research Institute — Atlanta, GA
Research Assistant — *Aug 2022 – May 2023*
- Transitioned emergency procedure manual iPad application to React webpage with newer features
- Developed Python script to parse styling information from Excel sheet database in order to render on webpage
- Enhanced user experience by adding features to allow for adding, removing, and editing of emergency manuals

Georgia Tech Research Institute — Atlanta, GA
Research Software Engineering Intern — *May 2022 – Jul 2022*
- Assisted in identifying issues with user-uploaded ML models by developing an error analysis visualization tool
- Iterated continuously on various dashboard designs and visualizations to maximize user experience with React
- Designed data architecture to allow seamless communication with database in Flask and pandas

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
- Dispatched analyzed parking spot data to drivers gathered through mobile app
- 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

GT Esports — Atlanta, GA
Advisor, Vice President, Creative Department Head — *Sep 2020 – May 2023*
- Restructured organization by interviewing/onboarding new staff and creating new procedures
- Boosted and promoted 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

PROJECTS

gamelettr | *Python, Websockets, Event Handling, REST APIs*
- Provided quick tournament lookup information for regional and global events through Discord bot
- Consumed Riot Games Esports API to get accurate, live tournament information
- Utilized formatting algorithms with data structures to display information sent to Discord using `discord.py`
- 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:	React, Websockets, API, Event Handling, Flask
Languages:	English (native), Chinese (fluent), Korean (beginner)