# Amelia Fatykhova

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#### **EDUCATION**

#### Georgia Institute of Technology | Atlanta, GA

Master of Science in Computer Science, GPA 4.00/4.00

August 2023 - May 2024

• Concentrations: Human Computer Interaction

Bachelor of Science in Computer Science, GPA 3.57/4.00

August 2019 - May 2023

• Concentrations: Media (Computer Graphics) & People (HCI)

#### **WORK EXPERIENCE**

#### Cisco Meraki | San Francisco, CA - Remote

May 2023 - January 2024

## Software Engineering Intern

- Summer 2023 Fall 2023 internship with the Data Engineering team; utilized Scala, PostgreSQL, Jira, Jenkins, Gerrit
- Created a framework for dynamic instantiation of "Grabber" Scala services in Docker containers; deployed to Kubernetes
- "Grabbers" grab data from network nodes; deployed a proof-of-concept containerized grabber to production environment

## Cisco Meraki | San Francisco, CA

*May 2022 – August 2022* 

Software Engineering Intern

- Data Engineering team: utilized Scala, Rails, PostgreSQL, Jira, Jenkins, Gerrit, to write backend software for networks
- Created new aggregation protocols for node (routers and switches) data to optimize network communication
- Intern project focusing on extending Scala data aggregation framework with file reading and data formatting, data sent to S3

## Adobe | Waltham, MA

*May 2021 – August 2021* 

## Software Development Intern

- Created an Adobe Sign dashboard with user-based dynamic charts, utilizing full-stack development across microservices
- Used MySQL to create multiple user report changesets, as well as the Vega Visualization library to generate charts in the UI
- Gained experience in Spring Boot, Liquibase, Jira, Docker, and Jenkins; ranked #8 out of 633 Summer 2021 intern projects

# Georgia Tech Research Institute | Atlanta, GA

January 2021 - May 2021

## Software Development Intern

- Worked on the HRAPS front-end team developing a web application to track vital monitoring in the field for the U.S. Army
- Used React is and JavaScript to add key features to the web application, including dashboards, forms, page submit functions

# **RESEARCH & PROJECTS**

# Strangeland Virtual Reality Research Project – Graduate Researcher

January 2024 – Present

- Researcher working on 3D-audio integration into Strangeland Unity Virtual Reality research experiment; using Git, Unity
- Utilized SWAN 3D audio system to implement binaural sound into Strangeland for accessibility and sound navigation

#### Navigation Sonification Simulator – CS 4590 Computer Audio Project

October 2022 – December 2022

- Simulator for airport navigation for Hartsfield Jackson International Airport; bag location mode, security line time mode
- Utilized Processing P5 Java and Beads libraries to generate sonifications for the user for sound-based information delivery

## Secure Voting Machine Research Team – System Design Team Lead

August 2021 – December 2022

- GT vertically integrated research project to create a secure embedded voting machine; spearheaded System Design and UI
- Developed Kotlin RESTful API and MySQL relational database for embedded device to server communication

#### Bank Database GUI – CS 4400 Database Systems Project

*March* 2022 – May 2022

- Team project: MySQL database created including ERD diagrams and constraints, changesets, and 25+ stored procedures
- Utilized JavaScript, HTML, CSS to create GUI for each stored procedure; separate admin, user, and manager menus

#### LEADERSHIP & ACTIVITIES

## Outdoor Recreation Georgia Tech (ORGT) – Trip Leader

January 2020 – Present

- Conducted classroom sessions and team facilitating to lead trips with 15+ GT students on adventure trips through caves
- Oversaw the training and leadership development of newer staff members; trained advanced vertical rope techniques

## **SKILLS**

Programming: Java, Scala, JavaScript, Python, MySQL, PostgreSQL, React.js, HTML, CSS, P5.js, D3.js, C#

Tools: Docker, Kubernetes, Jenkins, Jira, Git, GitLab CI/CD, Confluence, Kibana, Elasticsearch, Grafana, S3, Agile, Unity