RYAN MILES

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EDUCATION

Master of Science in Computer Science *Specialization in Computing Systems* August 2021 - May 2022
Georgia Institute of Technology, Atlanta, GA.

Bachelor of Science in Computer Science *Specialization in Graphics & AI* August 2017 - May 2021
Georgia Institute of Technology, Atlanta, GA. GPA: 3.90

SKILLS

Programming	(Proficient) Java, Kotlin, Python, Android | (Beginner) LaTeX, Typescript, SQL, React
Android Libraries	LiveData, Android Jetpack, Timber, Dagger, Firebase, OkHttp, Retrofit, Fresco, EventBus
Coursework	Database Design, Data Structures and Algorithms, Computer Graphics, Artificial Intelligence
Platforms	Mac, Windows, Android, Ubuntu Desktop, Ubuntu Server, NixOS

WORK EXPERIENCE

Software Engineering Intern (Android) at BlueFletch, Atlanta, GA May 2018 - Present
· Developed an Android for Work platform in Java that increased supported devices by 1500%
· Developed an AOSP platform service to run system level commands on manufacturer signed devices
· Programmed an AES encrypted IPC channel for secure data transfer between apps through an AIDL interface
· Designed a customizable & secure Android notification drawer replacement that displays only allowed notifications
· Increased an Android project's code coverage from 0% to 70% using Espresso, JUnit, Mockito, and Robolectric
· Saved 5-7 development hours per demo by implementing an automatic theming library to change the app's theme

Teaching Assistant at Georgia Tech, Atlanta, GA Jan 2019 - Present
· Teaching Assistant for: Intro to Computer Graphics, 3D UI Design in VR, and Intro to OOP
· Taught a 1.5 hour weekly recitation, held office hours, graded tests & homework, and helped create assignments

Research Assistant in the AEL Lab at Georgia Tech, Atlanta, GA Jan 2021 - Aug 2021
· Spearheaded integrating VR into a virtual conferencing platform using react, babylon.js, and webXR
· Deployed the project to an EC2 instance with a PostgreSQL db, NGINX web server, and Typescript codebase

PROJECTS *All projects available at ryanmiles.me*

Unfoldit Android *Kotlin, Dagger, Firebase Analytics, Single Activity MVVM Architecture* Aug 2018 - Present
Creation of Unfoldit Android, a mobile app to test and enhance your spatial awareness abilities
· Developed a production ready Android game focused on spatial awareness with Kotlin, modern libraries, and tests
· Finalists for the Georgia Tech 2019 InVenture Prize with 1000+ downloads and 100+ five-star reviews

Machine Learning For Trading Project *Python, Pandas, Numpy, Matplotlib, LaTeX* Aug 2019 - Dec 2019
Wrote a final project paper in LaTeX using Random Forest with technical indicators to trade stocks
· Calculated Momentum, Bolinger Bands, and Volume-Price Trend % to use as technical indicators
· Implemented Random Forest learning and a market simulator using Python, Pandas, and Matplotlib

Europe Train DB System *SQL, EER Diagram, IF Diagram* May 2019 - Aug 2019
Collaborated on designing and implementing a database system for Europe's Train System
· Designed an Enhanced Entity Relationship Diagram & Information Flow Diagram to model the database
· Programmed the SQL create table & query statements per each project specification

Space Trader Android *Java, Room, UML, JUnit, GSON, Recycler View, Travis.ci* Jan 2019 - May 2019
Collaborated on Space Trader Android, a retro complex strategy game, redesigned for Android
· Lead our five person team in weekly scrum meetings and code reviews for each project milestone
· Designed the backend Room database with serialization for saving & restoring player game state

ParkHere Android *Java, EventBus, Bottom Navigation, Google Maps* November 2017
Creation of ParkHere, an Android app that allows users to find & pay for nearby parking
· Leveraged Google Maps with custom markers to show users nearby parking lots with their prices
· Designed the UI to allow users to pay for a parking spot, increase their parking time, or contact support