Jekko Syquia

Waldorf, MD · jekko.syquia@gmail.com · (240) 640-2307 · https://jekkogray.github.io/jekkogray.io/index.html

### **TECHNICAL SKILLS**

Languages:Kotlin, Swift, Java, Javascript, Python, Objective-C, C/C++, C#, Bash, XML, HTML/CSS, SQL/NoSQLTools:AWS, Node.js, REST API, WebGL, React-Native, Git, React.js, JetPack Compose, SwiftUI, DockerSoftware:Unity(VR)(C#), Unreal Engine 5, Blender, Gamemaker, Adobe Creative Cloud (XD, PS, AI, AE)OS:Windows, UNIX/LINUX/MACOSDatabase:Firebase(Cloud-based NoSQL), MongoDB(NoSQL), MySQL

# WORK EXPERIENCE

#### Mobile Software Development Lead The MITRE Corporation, FCC TRS IRIS

October 2021 - Present Remote, Waldorf, MD

- Orchestrated the development of captioning support for server and mobile platforms, enabling crucial captioning for relay services, showcasing leadership and technical expertise.
- Executed rapid development of an iOS platform app for a WhiteLabel client by leveraging existing Android code, completing the project within a tight two-month deadline.
- Spearheaded R&D efforts to create a cross-platform solution for incoming calls, enhancing user experience by leveraging notification systems like Firebase Cloud Messaging and Amazon SNS on React Native.
- Enhanced background processes for incoming calls across platforms, optimizing system reliability and efficiency through a streamlined notification system.
- Expanded cross-platform support on the Application server for calls on Android, iOS, and external numbers, significantly improving application accessibility.
- Developed comprehensive software and notification system documentation, ensuring clear understanding among stakeholders of system functionality.

### **Unreal Engine Software Engineer**

The MITRE Corporation, Immersion Labs

March 2023 - Present Remote, Waldorf, MD

July 2022 - March 2023

Remote, Waldorf, MD

- Developed a CCTV subsystem using NDI and Pixel Streaming in Unreal Engine for WebRTC and remote device streaming in Digital Twins.
- Contributed to the design and implementation of Crane Port Operations for container movement simulations

### **Unreal Engine Software Development Lead**

The MITRE Corporation, Supply Chain

- Designed and developed a digital twin of the Port of Mobile in Unreal Engine 5, including logistics, to simulate real-world scenarios.
- Created high-quality 3D models and animations to accurately capture discrete event simulation, resulting in a realistic and immersive user experience.
- Led a team of developers in setting and achieving project goals, resulting in the successful delivery of an application demo product in less than two months.
- Improved the speed of product demo delivery by 50%, by implementing agile development methodologies and effective project management strategies.
- Received positive feedback from project leads and the Supply Chain VP for creating an impressive Demo that was seen as a viable product in the future.
- Trained and mentored incoming developers to the project, providing guidance on integration and ensuring that the project was delivered to a high standard.

### **Systems Engineer**

The MITRE Corporation, High Performance Computing

October 2021 - March 2022 Remote, Waldorf, MD

- Automated software deployment process using Ansible, resulting in a more efficient and streamlined process.
- Contributed to multiple development and testing efforts for C-SPAN, utilizing front-end development skills in React and other technologies to create user-friendly interfaces and improve the overall user experience. Utilized agile methodologies and collaboration tools to ensure timely delivery of high-quality software.
- Organized and facilitated the HPC Community of Practice, a cross-functional group of engineers that focused on sharing knowledge and best practices in high-performance computing.
- Conducted research and deployed OpenOnDemand, a web-based platform that simplifies access to high-performance computing resources, improving the user experience for researchers and scientists.

## Software Engineer

onceLabs LLC

July 2021 - October 2021 Remote, Waldorf, MD

- Created and published full-scale Android and iOS applications focused on Bluetooth, wireless connectivity, and control, using Kotlin and Swift, resulting in a successful and user-friendly application.
- Developed modern Android applications using Jetpack Compose, a component-based UI toolkit that improved UI development and resulted in a more efficient and streamlined codebase.
- Designed and implemented complex user interfaces, frameworks, and robust app architectures for both front-end and back-end, resulting in a scalable and maintainable application.
- Migrated and maintained DevOps operations on onceLabs website to AWS EBS instance using Docker and Docker Compose, integrated with Travis CI, resulting in improved scalability, reliability, and automation of the deployment process.

#### Full Stack Developer and Laboratory Technician

November 2018 - May 2021 The George Washington University: School of Engineering & Applied Sciences Washington, DC

- Conducted full-stack development on a web portal for judges in the Research Showcases competition, resulting in a user-friendly and efficient platform for showcasing research projects.
- Designed and developed 3D models for the Mozilla Hubs research showcase, utilizing industry-standard design tools and techniques to create engaging and visually appealing models.
- Led annual Arduino and Raspberry Pi workshops, teaching C++ programming to participants and fostering a culture of learning and innovation.
- Provided technical support to professors and students, troubleshooting software installation, 3D printing requests, and DHCP and AWS registration issues, ensuring a smooth and seamless technology experience for all stakeholders.

## PROJECTS

PhotoComposer Kotlin/Java, Gradle, TensorFlow, Android SDK, Firebase(NoSQL), MLKit, PixabayAPI, OpenCV https://github.com/jekkogray/Photo-Composer PhotoComposer is an Android smart-camera app that teaches users how to take better photos. Used Tensorflow and MLKIT to perform complex subject detections. Won the The Gary and Judy Bard Entrepreneurial Engineering Endowment Award for this senior project

**SpotThat** *Kotlin/Java, Gradle, Spotify REST API / OAuth(JSON), Firebase(NoSQL), Google Maps SDK* https://github.com/jekkogray/SpotThat

Designed and developed an Android application written in Kotlin to aggregate, pin and play playlist by different users in the application around the world. Managed and designed the NoSQL database to enable efficient networking calls on the FireBase Real Time Database. Registered and stored user information playlist with OAuthentication in the Spotify API.

**Research and Development Showcase Judging Web Application** *Node.js, React.js, MongoDB, Express* Worked as a project co-manager with a team of programmers tasked with developing an automated version of the judging system for the yearly showcase in GWU. Helped innovate the first automated judging system using Node.js with React.js for the client and MongoDB with express for the server side. Performed weekly testing and optimizations for the judging portal application to ensure reliability.

#### EDUCATION

Bachelor of Science in Computer ScienceMay 2021The George Washington UniversityWashington, DC

### AWARDS

Applause Award - FCC Iris	Mitre <b>2022</b>
Spark Award - FCC Iris	Mitre <b>2021</b>
The Gary and Judy Bard Entrepreneurial Engineering I	Endowment Award GWU 2021
Adobe Creative Jam 2018 Winner - Graphic Design	Adobe <b>2018</b>
Presidential Academic Art Scholarship Awardee	The George Washington University <b>2017-2021</b>
Class Salutatorian	St. Charles High School 2017