
ABOUT ME

I am a Computer Science Master's candidate with an interest in networking, database, and SaaS/microservice design. My work experience has had me design and oversee deployment of microservices for managing SQL database transactions, secure OAuth login procedures, and cross-device synchronization. I hope to leverage this experience to build truly beautiful and seamless experiences in software as a service.

TECHNICAL KNOWLEDGE

- **Languages:** C/C#/C++, Java, Python, Bash, x86 Assembly, SQL, Rust, Javascript
- **Technology:** AWS S3 + Lambda + Cognito, TCP/IP stack, Unity Engine, Android SDK, Google Firebase, Flask + Flask RESTful API, WCF SOAP/REST API, Docker, PostgreSQL
- **Networking/Forensics:** IPTables, Snort IDS, hping3, rsyslog, Autopsy, ProDiscover

PROJECTS

- **ASUniverse:** Designed and began deployment of OAuth 2 PKCE login procedure for university applications. AWS Cognito provided identity management for authentication with ASU SSO. Lambda leveraged for faster on-demand OAuth event management and new key generation.
- **Designing Resilience Dividends: Energy and Housing Futures:** Augmented Reality live animation played across hundreds of devices for ASU KER's Designing Resilience Dividends event. Built on Unity and synced live across Android, iOS, and WebGL platforms.
- **Scavenger Hunt:** Gamified guided tour app made for Arizona State University. Built on Unity, with user data and dynamic content served from Firebase cloud database. Used performance benchmarking tools to achieve optimization goal of 40% lower frame render time.
- **EmergenTech 2020:** Decentralized vaccine distribution tracking network built on Ethereum blockchain smart contracts, with NodeJS front end.

WORK EXPERIENCE

- **Immersive Creation Studio @ ASU** Tempe, AZ
Creative Developer *May 2021 - May 2022*
 - Developed augmented reality experiences for education and industry clients.
 - Implemented concurrent multiplayer in Unity projects.
 - Designed FERPA compliant user data storage system.
 - Designed OAuth 2 PKCE authentication system on AWS Cognito/Lambda.
- **Arizona State University Economics Department** Tempe, AZ
Office Assistant *September 2019 - May 2020*

EDUCATION

- **Arizona State University** Tempe, AZ
B.S., Computer Science (Cum Laude) *Aug. 2018 - May 2022*
M.S., Computer Science *August 2021 - est. May 2023*
- **Relevant Courses:** Networking, Network Security, Computer Systems Security, Database Management, Software Architecture & Design, Data Structures & Algorithms, Advanced Algorithm Design & Analysis, AI & ML Ethics