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# **Andrew Sunwoo**

andrewjsunwoo.github.io/Portfolio/ Ogithub.com/AndrewJSunwoo in linkedin.com/in/andrewjsw

#### **EDUCATION**

## **Bachelor of Science in Computer Science**

Aug 2019 - May 2023

Virginia Polytechnic Institute and State University (Virginia Tech)

Blacksburg, VA

#### **SKILLS**

• AWS • React • TypeScript • JavaScript • Material-UI • CI/CD • Kubernetes • Docker

#### **CERTIFICATION**

• AWS Certified Developer - Associate (2024) • AWS Certified Cloud Practitioner (2022)

## **WORK EXPERIENCE**

## Founding Engineer / Full Stack Developer Intern

Aug 2023 - Present

Remote

HashedTokens

- Building and iteratively refining an OTP SaaS platform aimed at optimizing secure document and link sharing, with plans to gather and incorporate user feedback upon market launch.
- Spearheading the development of a responsive admin web application using **React**, **TypeScript**, and **Material UI**, enabling granular access control and real-time OTP usage data for informed stakeholder decisions.
- Delivering a robust and secure server for the admin web application with **Node.js**, **Express**, **TypeScript**, and **MongoDB**, ensuring secure data storage and enhanced authorization through **OAuth** authentication with Passport.js.
- Architecting a highly scalable Go server for the core OTP system with RESTful API endpoints, integrating Redis and PostgreSQL using Docker for efficient data management, and deploying it seamlessly on AWS using Terraform.

#### Software Developer Intern

May 2022 — May 2023

Systems Definition Inc.

Alexandria, VA / Remote

- Contributed to a cross-functional team developing a web application for U.S. Fire Departments, leveraging **React**, **TypeScript**, and **Material UI** to enhance data visualization and user experience.
- Utilized comprehensive **Java** skills to ensure accurate data transmission and effortlessly integrate library migrations within the **Spring** Framework, optimizing overall system performance.
- Increased system efficiency by optimizing MongoDB queries with queryBuilder, leading to significant performance improvements.
- Proficient in Agile, streamlining workflow through Jira for task management and TortoiseSVN for efficient version control.

## **Software Developer Intern**

Aug 2021 — Dec 2021

Triangle Works Corporation

Remote

- Designed and developed RESTful APIs in TypeScript within a Scrum Team, utilizing Winston logger and AWS CloudWatch for robust error tracking.
- Improved application responsiveness by optimizing AWS DynamoDB queries and access patterns, resulting in a demonstrably smoother user experience.
- Led the design of the web application using Figma, creating an intuitive and user-friendly interface.
- Ensured Agile project progression and code consistency by leveraging **Jira** and **Bitbucket** for effective collaboration.

## **PROJECTS**

## Quote Generator Application | Next.js, AWS Amplify, AppSync, Cognito, Lambda, and DynamoDB

• Built a dynamic quote generator application using Next.js for an engaging user experience, backed by a serverless architecture on AWS Amplify with AppSync, Cognito, Lambda, and DynamoDB for efficient hosting, scalability, and continuous deployment.

#### Facial Recognition | React, Rekognition, Lambda, DynamoDB, API Gateway, and S3

• Developed a facial recognition system using AWS Rekognition, Lambda, and DynamoDB to securely authenticate users, featuring a user-friendly React JS frontend and seamless integration with backend services.

#### Jenkins Docker Pipeline for Kubernetes | Jenkins, GitHub, Docker, and Kubernetes

• Implemented a Jenkins pipeline with Docker integration to automate containerized application deployments to Kubernetes, ensuring portability and scalability.

## End-to-End CI/CD Automation | Jenkins, Ansible, Docker, GitHub Webhooks, and AWS EC2

• Automated End-to-End CI/CD pipeline with Jenkins on AWS EC2, Docker containerization, and GitHub webhooks for continuous integration, seamless deployments, and consistent environments.