# Tyler Woodruff

# Education

# University of Florida

May 2024

B.S. & incoming M.S. in Computer Science, Major GPA 3.91/4.0

Gainesville, FL

Remote

#### Experience

Nyte Health

FIS Global

November 2023 – Present

Software Engineer

- Implemented system to convert proprietary data format to X12 HIPAA EDI format.
- Designed and built cross-platform application for submitting insurance benefits inquiries and claims to payers.
- Created GitHub Actions CI/CD pipeline for deploying cloud-native CDK infrastructure to AWS.

Software Engineer Intern

June 2023 – August 2023 Milwaukee, WI

- Collaborated with other interns to design a Docker-based deployment environment for FIS's IST Switch.
- Presented work to senior developers on multi-national teams.
- Wrote and updated documentation for Docker-based IST Switch development and deployment.

FluidSecure

June 2022 – August 2022

Software Developer Intern

Tallahassee, FL

- Improved accessibility on company website.
- Created multimedia marketing materials and webpages for newly-released products.

# **Projects**

# Cyber Search (UF Startup Incubator) | Go, TypeScript, Sveltekit, Tailwind CSS

October 2023

- Built a tool for looking up people by their names, phone numbers, addresses, and social media accounts.
- Developed scripts to scrape web pages, store valuable information, and find further pages to scrape.
- Implemented custom TLS client to bypass industry-grade Cloudflare anti-bot solutions.
- Admitted into UF Gator Hatchery Startup Incubator.

#### OS Network Stack Fingerprinter | Go, PCAP Packet Capturing

August 2023

- Architected an application for fingerprinting remote machines' network stacks via TCP/IP packet header values.
- Developed firewall to block unrecognized fingerprints from reaching vulnerable services.
- Successfully blocked 60% of malicious requests to machine in live CTF competition.

#### SHA-256 & MD5 Implementation (Data Structures Project) | Go, SHA-256, MD5

December 2022

- Built popular cryptographic hash functions to NIST whitepaper specification from scratch.
- Implemented a system for direct comparison of hashing speed between the two algorithms.

#### Sables (Hackathon Project) | Go, AWS Rekognition, Polly Voice Generation

February 2022

- Designed and built a product that promotes accessibility on the internet for persons with visual impairments.
- Utilized AWS APIs to process image information and read contents back to user in an AI-generated voice.
- Created marketing materials to present project ideation, development process, and development challenges to judges.

# **0xRay NFT Extension** | Go, JavaScript, React, Chrome Extension

September 2021

- Designed algorithm to calculate rarity of individual NFTs relative to others in same collection.
- Displayed NFT information directly onto Opensea.io for convenient access.
- Shipped the first free NFT rarity extension. Concurrently served over 2,000 users.

# Technical Skills

Languages: Go, Python, C, C++, Java, HTML/CSS, JavaScript, TypeScript, SQL

Developer Tools: AWS, Google Cloud, Git, Vim, Ghidra, GDB, VirtualBox, CI/CD, CDKs

Technologies/Frameworks: Debian Linux, Docker, MongoDB, Svelte, React, REST, Tailwind CSS, OAuth2

Interests: Backend Development, Security, Reverse Engineering, Web Scraping & Automation

#### Leadership / Extracurricular

# UF Student Infosec Team (UFSIT)

Fall 2023 - Present

Blue Team & CTF Team Member

University of Florida