Nathan Albe

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EDUCATION

George Mason University Fairfax, VA
Bachelor of Science in Computer Science, Minor in Computational Data Science, GPA: 3.7 Expected May 2026
Relevant Coursework: Data Structures and Algorithms(Java), OOP(Java), Low-Level Programming(C)(in progress),
Discrete Math, Linear Algebra, Statistics
CodePath Intermediate iOS Development: 10-week course on iOS Mobile Development

TECHNICAL SKILLS

Programming Languages: Python, Java, C, Swift, HTML/CSS, JavaScript, ReactJS, NodeJS, SQL
Technologies/Tools: Linux, Unix, Git, JUnit, npm, Gradle, Flask, vSLAM, OpenCV, Firebase, Parse
Certifications: AWS Certified Cloud Practitioner, **Interim Security Clearance: Secret**

WORK EXPERIENCE

Lockheed Martin Owego, NY
Incoming Systems Engineering Intern Aug 2024 – Dec 2024

George Mason Department of Computer Science Fairfax, VA
Undergraduate Teaching Assistant Jan 2023 – Present
- Leading office hours for 600 students in the Introduction to Computer Programming course
- Conducted weekly review sessions on topics involving Python(fundamentals, expressions, control structures, simple data types, input/output, and unit testing) and Linux/Unix(command line, file manipulation, networking)
- Collaborated with faculty to assist comprehensive Python course materials, encompassing 5 exercises, 11 assignments, and 7 programming projects

George Mason Department of Information Sciences and Technology Fairfax, VA
iOS/Mobile Development Research Assistant Oct 2022 – May 2023
- Designed the front end of an iOS/watchOS application using SwiftUI for emotion regulation for neurodiverse users
- Implemented Swift library HealthKit to actively track users' heart rate and offer emotion-improvement suggestions, resulting in a 90% positive user response rate
- Developed a responsive database for storing user information using Firebase's Realtime database

PROJECTS

PatriotHacks Hackathon (Java, OpenCV, vSLAM, Gradle, Computer Vision)
- Developed an AI Vision Navigation System for visually impaired individuals that won 1st place among 500 students
- Using Java, OpenCV, and vSLAM technologies trained the system on data models to identify 80 different objects
- Implemented a custom specialized Neural Network for gathering spatial information to alert the user of objects

Finsta(Swift, Firebase)
- Developed an Instagram clone using Swift, leveraging Firebase Firestore for real-time database functionality
- Utilized Firebase Authentication for secure user authentication within the Instagram clone app
- Incorporated Firebase Storage for efficient storage and retrieval of media content using cache memory

Shrinkster (Python, JavaScript, ReactJS, HTML/CSS, Flask, Firebase)
- Using React developed a web application to allow users to truncate an existing long URL
- Built Flask server for Firebase-mediated URL redirection, transforming long URLs into shorter, accessible formats
- Implemented Firebase Realtime database for efficient storage and retrieval of URLs to and from the server

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Management Leadership for Tomorrow Washington, DC
Career Preparation Fellow Jan 2024 – Present
- Accepted into a selective 18-month professional development program for high-achieving diverse talent
- Complete business case studies and assignments to grow leadership and technical skills
- Attend conferences hosted by industry leaders, such as Bloomberg, LinkedIn, and Google

National Society of Black Engineers Fairfax, VA
Senator Aug 2023 – Present
- Led electoral processes and represented at regional/national engineering events
- Assisted in fostering academic and professional excellence by hosting high school events for students to learn more about NSBE