

# 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), Operating Systems(C), Data Mining(Python), Data Visualization(Python), Databases(SQL), Discrete Math, Linear Algebra, Statistics

## TECHNICAL SKILLS

**Programming Languages:** Python, Java, C, Objective-C, Swift, HTML/CSS, JavaScript, Typescript, MATLAB, SQL

**Technologies/Tools:** Linux, Git, Docker, Jenkins, Node.js, Flask, Django, GraphQL, Texture(iOS), OpenCV, Firebase, PostgreSQL

**Certifications:** AWS Certified Cloud Practitioner

**Active Security Clearance:** Secret

## WORK EXPERIENCE

### Pinterest

Remote

Software Engineer Intern

May 2025 – Aug 2025

- Redesigned metadata layouts for product and recipe Pins (shipping info, ratings, recipe data), boosting clickthrough rate by 13% and impressions by 8%
- Built a dynamic color filter bar for Women's Fashion-related Pins in Objective-C and Python, increasing filter engagement by 17% and saves by 10%
- Developed backend GraphQL API logic in Python, designing schemas, resolvers, and implementing consistent pagination, bookmarking, and ordering

### Lockheed Martin

Owego, NY

Systems Engineering Intern

Aug 2024 – Dec 2024

- Conducted regression testing and validated Jenkins builds to ensure RF signal detection compliance, improving operational reliability by 15%
- Performed system testing to validate MDLT tool requirements, enhancing RF signal emitter identification and threat detection
- Built and debugged Java frontend features with JTheme to resolve UI issues and streamline workflows

### Applied Fundamentals Consulting

Reston, VA

Software Engineer Intern

June 2024 – Aug 2024

- Built a VueJS + Quasar feedback web app with an admin/user system, improving bug fix times and achieving 90% positive client feedback
- Designed and implemented a PostgreSQL database to store user feedback, project details, and company information
- Collaborated in an Agile/Scrum workflow, aligning design and development with managers and the team

## 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 Convolutional Neural Network (CNN) to gather spatial information and alert users of nearby objects

### Shrinkster (React, TypeScript, Node.js, Flask, Firebase)

- Developed a full-stack URL shortener with React + TypeScript frontend and Node.js backend and Flask for redirection.
- Implemented Firebase Realtime Database to handle 1,000+ link generations in testing with **<200ms latency**.
- Enhanced UI with validation and error handling, improving successful link creation by **25%** vs. baseline prototypes.

## 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
- Gained professional and technical skills through case studies and conferences with firms like Bloomberg and Google

### ColorStack at George Mason University

Fairfax, VA

Founding President

Jan 2024 – Present

- Established and led the first ColorStack chapter at George Mason University, fostering an inclusive environment for Black and Latinx CS students
- Implemented resume workshops, interview prep, and job search support, growing the chapter to 100+ members