Alexander Klein

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EDUCATION

University of Florida, College of Engineering

Gainesville, FL

Bachelor of Science in Computer Science, Minor in Economics GPA: 4.00

May 2026

Relevant Courses: Data Structures and Algorithms, Operating Systems, Advanced Programming Fundamentals

SKILLS

Languages: Python, C/C++, JavaScript, HTML/CSS, C#, SQL Frameworks: React, React Native, Node.js, Tailwind, Cloud Firestore Developer Tools: Git, Firebase, Jira, Azure DevOps, SQL Server

Experience

Software Engineer Intern (STEM Program)

June 2024 — August 2024

Akima

Herndon, VA

- Maintained the web-based Navy Marine Corps Mobilization Processing System, using ASP.NET and SQL
- Developed an XR Construction Design application for Meta Quest 3, utilizing ${\bf Unity3D}$ with ${\bf C\#}$
- $\bullet \ \ \text{Implemented real-time multiplayer using } \textbf{Photon PUN}, \ \text{supporting simultaneous collaboration for } \textbf{20+ users}$

Web Development Lead

January 2024 — May 2024

UF ACM Design Team

Gainesville, FL

- Led an agile team of 4 developers in the comprehensive redesign of the organization's website using React
- Implemented an attendance tracking system for 300+ users using Firestore, reducing data calculation by 83%
- Designed a modern UI with Framer Motion and Tailwind CSS, producing a 65% increase in user engagement

Projects

File System Daemon | C++, FUSE

April 2024

- Developed a userspace filesystem daemon using the **FUSE API** to perform read/write operations on WAD files
- Constructed a C++ library to parse and manipulate WAD file headers, descriptors, and lump data
- Integrated unit tests with GoogleTest to achieve 80% code coverage across library functions

Mental Health App | React Native, Firebase, Gemini

March - April 2024

- Designed a cross-platform mobile app using React Native with an AI mental health coach, journal, and task list
- Implemented a mental health coach by leveraging prompt engineering techniques with Google's Gemini API
- Integrated user authentication using Firebase OAuth and utilized Firestore for cloud storage and retrieval

Chess Data Analyzer | Python

December 2023

- Led a team in developing a chess analytics tool using Python to evaluate 100,000+ chess match data points
- Presented user-selected data using the CSV library on opening rankings, player reports, and high-level matches
- Optimized algorithms, transitioning from quick to merge sort, resulting in a 96% reduction in sorting time

Extracurricular

Internal Vice President | *UF Association for Computing Machinery*

May 2023 - Present

- Coordinated 12 officers in the execution of professional, social, and technical events for 2000+ members
- Founded and led the ACM Design Team, managing and collaborating on 2 software development projects
- Began a club newsletter, showcasing events, computing careers, and opportunities for 300+ recipients

Social Media Influencer | TikTok, Instagram

May 2024 - Present

- Created hairstyling content across TikTok and Instagram, growing to 22k+ followers and 2m+ likes
- Collaborated with brands like Based Bodyworks, Simpletics, and Glaker to promote hair products
- Leveraged SEO strategies and content gap optimization to achieve over 27 million views