Cole Smith

(720) 999-6902 | colesmith5400@gmail.com | linkedin.com/in/colesmith54 | github.com/colesmith54

EDUCATION

University of Florida — Aug. 2023 – May 2027
Bachelor of Science in Computer Science, Minor in Mathematics — *Cumulative GPA: 4.00*

- **Relevant Courses**: Data Structures and Algorithms, Advanced Programming Fundamentals, Intro to Computer Organization, Computational Linear Algebra, Applications of Discrete Structures

EXPERIENCE

Undergraduate Researcher — Aug. 2023 – Present
UF SurfLab — *Gainesville, FL*

- Developing an iOS client for a surgery simulator, refactoring the remote and local servers to allow for device connection, and testing with surgeons from the UF Shands hospital
- Integrated a Bernstein-Bezier coefficient generator for polar patch generation, extending sector support from 3-8 to any arbitrary $n \geq 3$, allowing for greater mesh compatibility for B-spline patches

Technical Officer — Dec. 2023 – Present
UF Software Engineering Club — *Gainesville, FL*

- Developing a full-stack React Native mobile application aimed at unifying the UF club experience to promote university-wide club participation and offer a better experience
- Collaborating in an Agile team environment on the R&D team, working on larger, experimental projects
- Currently building an API endpoint to allow developers to push app-wide alerts such as maintenance

PROJECTS

Attitune | *Next.js, Flask, MongoDB, Tailwind CSS, OpenAI* — Oct. 2023

- Utilized OpenAI GPT-4 API for sentiment analysis of 4 distinct attributes to recommend music
- Incorporated a cloud database with MongoDB Atlas populated with migrated Spotify Web API data to increase performance by 92% and eliminate the risk of rate limits

Hospes | *MERN Stack (MongoDB, Express, React, Node)* — Sep. 2023

- Implemented a host/property filtering system and a REST API to connect to the React frontend
- Quickly adapted to teck stack challenges, requiring a migration from Django to MERN due to authentication limits near the end of development

Graphing Calculator for iOS | *Swift* — July 2023

- Engineered a comprehensive graphing calculator featuring a custom-built parser, tokenizer, and interpreter, capable of graphing multi-argument functions

Sorting Algorithm Visualizer | *HTML, CSS (Bootstrap), JavaScript* — May 2023

- Developed an algorithm visualizer featuring a variety of sorting methods, complete with options to visualize each sort step-by-step and input custom arrays

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, HTML/CSS, Swift, Java, SQL
Frameworks & Libraries: React, Next.js, Node.js, Flask, Tailwind, TensorFlow
Developer Tools: MongoDB, Git, Unix, Linux, VS Code, Visual Studio