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 *Cumulative GPA: 4.00*

- **Minors**: Mathematics, Statistics
- **Honors**: University Scholar (publication by April 2025)
- **Relevant Courses**: Data Structures, Algorithms, Software Engineering, Computer Organization, Computational Linear Algebra, Discrete Structures, Statistics

Experience

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
- Collaborating in an Agile team environment on the R&D team, working on larger, experimental projects
- Added an endpoint to allow developers to push app-wide alerts, and emoji reactions to announcements

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

Projects

Sentimentor | *React, TypeScript, Node, MongoDB, FastAPI, TensorFlow, PyTorch* Mar. 2024

- Developed frontend and backend for a sentiment collection tool for professors to use during lectures
- Enabled seamless room creation/joining with join codes, and sentiment collection through manual input and/or facial analysis using Residual Masking Network

PathPilot | *React, TypeScript, Node, Framer Motion, Google Maps API, OpenStreetMap* Mar. 2024

- Processed over 136GB of OSM data into a directed graph with distance/speed limit as an edge weight
- Developed frontend and backend to perform route calculation using Dijkstra's and A*, using difference in angle between current node and next node with the end node as a heuristic

Sorting Algorithm Visualizer | *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, TypeScript, HTML/CSS, Swift, Java, SQL
Frameworks & Libraries: React, Node.js, Flask, Tailwind, TensorFlow
Developer Tools: MongoDB, Git, Unix, Linux, VS Code, Visual Studio