William Blake Crawford

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EDUCATION

University of Florida

Bachelor of Science in Computer Science

Minor in Mathematics

Gainesville, Florida

Aug. 2023 – May 2027 GPA: 3.89/4.00

EXPERIENCE

Undergraduate Research Assistant

Mar. 2025 – Present

University of Florida Precision Agriculture Lab | Dr. Won Suk Lee

Gainesville, FL

- Built COLMAP and VGGT based 3D reconstruction pipeline tailored to strawberry canopy structures.
- Designed novel extrinsic estimation method leveraging fixed camera height and linear path assumptions.
- Evaluated pipeline output using spatial benchmarks against NeRF, COLMAP, and standard vision baselines.

Software Engineering Intern

May 2025 – Aug. 2025

Zebra Technologies

Kennesaw, GA

- Engineered full-stack change logging system with Django, MySQL, and React to handle 100K+ monthly updates.
- Developed integration app using FastAPI, MongoDB, and React to sync customer Workday data via REST APIs.
- Created LLM-powered assistants with Llama 3 to query databases and schedule integrations from typed text.

Teacher Assistant, Programming Fundamentals 1

Jan. 2024 – May 2024

University of Florida CISE

Gainesville, FL

- Taught weekly sections of 50 students on OOP, control flow, data abstraction, and modularity in Python.
- Graded and identified algorithmic and syntax errors in varying programming exams, projects, and homework.
- Prepared review material, presentations, and study guides on programming fundamentals for 500+ students.

INVOLVEMENT

Software Engineer

Jan. 2025 – Present

UF QPSi AI Innovations | Dream Team Engineering

Gainesville, FL

- Engineered patient-level file system from disjointed CSV datasets and filtered clinical events post-2017.
- Automated timelines per patient with symptoms, procedures, and prescriptions as input to embedding pipeline.
- Mapped clinical codes to OMOP descriptions and generated BioBERT embeddings for event representation.

Collegiate Director

August 2023 – May 2025

Freshman Leadership Engineering Group (FLEG)

Gainesville, FL

- Led 10 undergraduate students in planning monthly events to promote student collegiate growth.
- Holding bi-weekly office hours to aid freshman engineers in their curricular decisions and pursuits.
- Working with a 20-member executive team to make decisions on behalf of the entire organization.

Projects

Clarifina (ShellHacks 2024 Winner) | React, TypeScript, AWS, Express, OpenAI API

- A React with TypeScript web application that simplifies terminology on user-uploaded financial documents.
- Implemented PDF storage in AWS S3 buckets that recognized text/bounding boxes using AWS Lambda Textract.
- Developed Express.js backend to send contextual prompts to OpenAI API and return user-facing responses.

Strange Showdown | Roblox Studio, Lua

- Developed a free-for-all, round-based multiplayer fighting game using Roblox Studio and the Lua language.
- Wrote a custom API to manage gameplay logic and character-specific state values across player models.
- Formulated full game flow to control round logic, GUI prompts, player onboarding, and datastore updates.

TECHNICAL SKILLS

Languages: C++, Go, HTML/CSS, Java, JavaScript, Lua, Python, SQL, TypeScript Tools & Databases: AWS, Firebase, Git, GitHub, MongoDB, MySQL, VS Code

Frameworks & Libraries: Django, Express.js, FastAPI, Flask, Matplotlib, Node.js, NumPy, Pandas, PyTorch, React.js