# Lucio Ruben Villena

Orlando, FL, 32825 | <u>luciovillena7@gmail.com</u> | (904)-510-6801 | <u>Linkedin</u>

### **EXECUTIVE SUMMARY**

Entry-level Software Engineer / ML & Data enthusiast with hands-on experience shipping full-stack apps, building embedded systems on MCUs, and leading student organizations. Currently completing a B.S. in Computer Engineering at UCF (May 2026) and planning to pursue an M.S. immediately after; seeking SWE/ML/Data roles where I can turn product ideas into measurable outcomes.

# **EDUCATION**

Expected Graduation: May 2026

University of Central Florida - Orlando, FL

B.S. Computer Engineering GPA: 3.641

#### **Relevant Coursework:**

• Completed: Data Structures and Algorithms, Computer Organization, Object Oriented Programming, Electronics I, Algorithms for Machine Learning,: Processes for Object Oriented Development, Embedded Systems

# **TECHNICAL SKILLS**

Languages: Python, Java, C/C++, JavaScript, SQL, HTML/CSS, MATLAB, MIPS Assembly

Frameworks/Tools: Node.js, Express, React, MongoDB, NumPy, Pandas, scikit-learn, Matplotlib, Git, Linux, Code Composer,

Fusion 360

**Domains:** Full-stack web (REST, auth, CRUD), Data & ML (EDA, feature prep, model training/eval), Embedded (MCU, PCB, sensors), Basic DevOps (Nginx/PM2)

#### **PROJECTS**

travelinggenie.com — AI Trip Planner- React, Node, Express, MongoDB, Gemini API, Linux Github

- Designed and documented secure REST endpoints for auth, email verification, and itinerary CRUD; shipped to a cloud VM with Nginx/PM2 for reliable uptime.
- Integrated LLM to transform inputs into structured plans; added server-side validation and logging to improve robustness and debuggability.
- Worked in a 7-person Agile team using branches, PRs, and code reviews to maintain velocity and quality.

# Socialoafers.org — Contact Manager - HTML, CSS, Javascript, MySQL, PHP GitHub

- Built a RESTful backend with parameterized SQL and input validation; optimized indexes for fast search/pagination.
- Delivered an accessible, responsive UI and documented API usage for teammates and future contributors.

### Range Finder — Embedded System - MSP430, C, Ultrasonic Sensor, Custom PCB GitHub

- Implemented low-level drivers and interrupt routines; applied timing/averaging filters to stabilize measurements and created a reproducible calibration guide.
- Evaluated regulators with an electronic load and folded results into the power budget for reliability under variable supply conditions.
- Practiced hardware-aware debugging (oscilloscope/logic-analyzer, CCS) and thorough test documentation.

# **LEADERSHIP**

### Pi Delta Psi Fraternity Inc. - Orlando, FL

• President May 2025 - Present

- Serve as chief executive for a 15-member chapter; set priorities, run executive meetings, and coordinate university compliance and national reporting to keep events and operations on track.
- Own stakeholder communication with the National Board; make time-sensitive decisions balancing risk, budget, and member experience.

• Warden August 2024 - May 2025

- Standardized chapter operations: organized meetings/events and implemented a Google Sheets compliance/fining tracker to improve accountability and on-time task completion.
- Academic Chair

  January 2024 April 2024
  - Led 25–30 study sessions and set up progress tracking for ~15 members, fostering consistent study habits and improved academic performance.

# **ADDITIONAL**

- **Honors:** Dean's/President's List (multiple terms).
- Coursework Projects: Data pipelines with Pandas/NumPy; baseline ML models in scikit-learn (classification/regression, feature scaling, train/test split, metrics).