

Pablo Pupo

(305) 298-1693 | pablofpupo23@gmail.com | linkedin.com/in/pablopupo | github.com/pablopupo

EDUCATION

University of Florida

B.S. in Computer Science, Minor in Business Administration

AI Fundamentals & Applications Certification

Gainesville, FL

Expected December 2026

EXPERIENCE

AI Engineer Intern

May 2026 – Present

Handtevy (Pediatric Emergency Standards)

Davie, FL

- Architected Handtevy's core **document-intelligence pipeline**, converting EMS protocol manuals exceeding **700 pages** into structured data for a clinical platform used by **200,000+ clinicians nationwide**.
- Designed multi-stage extraction, retrieval, and deterministic validation workflows that achieved **99% pre-review accuracy** on manually validated sets while reducing processing cost per PDF from **\$150+ to under \$20**.

Full-Stack Software Engineer Intern

May 2025 – August 2025

UKG (Ultimate Kronos Group)

Weston, FL

- Modernized **18+** high-traffic production pages in a distributed C#/ASP.NET system, improving runtime performance and reducing deployment regressions.
- Stabilized **600+** NUnit tests across backend services, reducing runtime by **40%** and accelerating deployment cycles; authored a CI/CD debugging guide adopted by onboarding engineers.

LEADERSHIP EXPERIENCE

Lead Software Engineer

January 2025 – Present

Machine Intelligence Lab

Gainesville, FL

- Built an ML data annotation platform (Next.js, FastAPI) for computer vision models, using OpenCV edge detection to generate polygons and bounding boxes for **RoboSub perception systems** in national robotics competitions.
- Designed and shipped a Three.js 3D-modeling [website](#) showcasing UF's robotics progress; recognized as the **top RoboSub website** and **top 15** at the international RoboSub **2025** competition.

Lead Software Engineer

September 2024 – Present

Society of Hispanic Professional Engineers (SHPE)

Gainesville, FL

- Maintained and enhanced an **iOS app serving 300+ users**; integrated a Node.js backend with Swift and implemented CI/CD (GitHub Actions/Fastlane).
- Serve as the **only programming tutor** for the **300+ member** chapter, leading weekly Python and C++ sessions on data structures and algorithms.

PROJECTS & OPEN SOURCE

Kit.ai – React, Vite, Node.js, Express, MongoDB, WebGPU

[Link](#)

- Built an **offline-first** emergency first-aid PWA running **Llama-3.2-3B** fully on-device via WebLLM + WebGPU, grounding answers in a vetted knowledge base cached in IndexedDB and synced from a Node.js/MongoDB backend.

Docling Open-Source Contribution – Python, Pytest

[Merged PR 3702](#)

- Fixed an optional-dependency isolation bug that blocked Docling's **core document converter** in slim installations; guarded email and Markdown imports and added subprocess-based regression tests with actionable install errors.

Accordo – Next.js, TypeScript, PostgreSQL, Prisma ORM, Stripe, Tailwind CSS

[Link](#)

- Developing a full-stack marketplace connecting musicians with clients (booking, contract, and payment workflows); **facilitated \$500+** in transactions and onboarded early users.

Solana Pay Invoicing Platform – Next.js, Node.js, MongoDB, Solana Pay

[Link](#)

- Built a full-stack crypto invoicing platform with QR-based payments via Solana Pay; won **Best Use of Solana** at **SwampHacks** out of **100+ teams (400+ participants)**.

TECHNICAL SKILLS

Languages: Python, TypeScript, C++, Java, SQL, C#, Swift

AI/ML Systems: RAG, hybrid search, embeddings, vector search, OCR, LangGraph, LangChain, Docling, PyTorch

Backend & Data: FastAPI, Pydantic, Node.js, Express, PostgreSQL, OpenSearch, MongoDB, Prisma, REST APIs

Frontend & Mobile: React, Next.js, iOS, Three.js, Tailwind CSS

Infrastructure & Tools: Docker, AWS S3, GitHub Actions, Fastlane, Git, Linux/Unix