

Arnav Bagmar

linkedin.com/in/arnavbagmar | github.com/ArnavBagmar | arnavbagmar.us

EDUCATION

University of Florida

May 2027

Bachelor of Science in Computer Science – GPA: 3.71/4.0

Gainesville, FL

- **Relevant Courses:** Data Structures and Algorithms, Operating Systems, Algorithms and Abstractions, Database Systems, Enterprise Software Engineering, Computer Organization
- **Certifications and Awards:** Undergraduate Certificate in AI Fundamentals

EXPERIENCE

Software Engineering Intern

June 2026 – Present

Ernst & Young

- Engineered an AI powered forensic fraud platform over a synthetic ERP dataset, orchestrating agents via a state machine to surface financial crime findings across 10K+ records.
- Designed a versioned rule engine with rule failure isolation across 20 categories, combining ML/graph signals into a weighted risk score and reducing false positive audit findings by 80%.

Undergraduate Research Assistant

Jan 2026 – May 2026

Computational Reasoning Group

Gainesville, FL

- Built a RAG quizzing engine using Ollama-served Llama 3 and a FAISS vector index over 100+ course documents, enabling instructors to auto-generate topic specific assessments for an intro CS course of 800+ students.
- Implemented scalable backend evaluation framework to handle concurrent code execution requests, reducing feedback turnaround time from hours (relying on TAs) to less than 2 minutes.

Software Engineer

Oct 2025 – May 2026

NOU

Orlando, FL

- Built the merchant side of a B2B marketplace in React, Node/Express, and PostgreSQL, designing the catalog and inventory schema and shipping the onboarding flow that brought the first 10 merchants live in 15 weeks.
- Led technical transition of the merchant platform to a 5 person team, producing architecture docs and API references that reduced onboarding time by 40%.

Software Engineering Intern

Aug 2025 – Dec 2025

Prepify AI

Gainesville, FL

- Shipped a real time interview feedback feature in TypeScript using a WebSocket gateway and Redis, delivering coaching events to active interview sessions with end-to-end latency under 50ms.
- Extracted the interview transcription and scoring pipeline from the Express monolith into a standalone Node service communicating over REST, reducing per-interview processing time from 120s to 45s by parallelizing the transcription and analysis stages.

Artificial Intelligence Intern

May 2025 – Aug 2025

Biz4Group

Orlando, FL

- Integrated HeyGen's avatar API with a GPT-4 WebSocket backend, chunking LLM token output into lip sync frames to reduce first-frame latency from 30s to 5s across 100+ live agent demo sessions.

PROJECTS

PowerLegal | [Website](#) | *Google ADK, Gemini 2.0 Flash, Python, React*

October 2025

- Built an AI case management tool at KnightHacks 2025 (**2nd place**) that ingested unstructured legal filings via Google ADK and Gemini 2.0 Flash and produced structured case timelines and argument graphs.

GitFlow | [Website](#) | *Python, React, TypeScript*

September 2025

- **1st place** and "Most Creative" project at ShellHacks 2025 for engineering a fully containerized development environment using **Docker** and **GitHub API**, enabling live repositories visualizaion and understanding.

GatorPlan | [Website](#) | *Python, Next.js, TypeScript, Postgres*

August 2025

- Built a full stack course scheduler in Next.js and Postgres, automating ingestion of 5000+ UF course sections via Python scraper and generating conflict-free schedules using constraint-based logic.

TECHNICAL SKILLS

Languages: Python, C++, Java, JavaScript/TypeScript, SQL, HTML/CSS

Frameworks & Libraries: React, React Native, Next.js, Node.js, Express, FastAPI, PyTorch

Databases & Tools: PostgreSQL, Redis, Docker, Git, AWS, Pandas, NumPy