Antony Ibrahim

(909) 257-1065 | antonyibrahim0@gmail.com | antonyibrahim.com

github.com/AntonyI1 | linkedin.com/in/antony-ibrahim

Experience

Startguides — Defense Contractor   **Dec. 2025 – Present**
Software Engineer   *Remote — California, USA*

- Led development of Meridian, a full-stack CRM (**React**, **TypeScript**, **FastAPI**, **PostgreSQL**) serving 40+ daily users.
- Architected a modular plugin system with RBAC, replacing 3+ external tools with 6 in-house services.
- Drove product roadmap with executives across sales, operations, and management, shipping weekly.
- Built a bulk importer with fuzzy matching and duplicate detection for **150K+ legacy records** across tables.
- Reduced page load times from **8s to under 2s** by parallelizing API calls and optimizing **PostgreSQL** indexes.
- Automated executive reporting via **n8n**, scheduling data aggregation and email delivery.
- Managed containerized deployments on **Azure** with **Docker**, maintaining **GCC High** compliance.

Genesis Healthcare   **Jun. 2024 – Dec. 2025**
Software Engineer   *Remote — California, USA & Japan*

- Built enterprise chatbots on **AWS Bedrock** with **RAG** and **FAISS** vector search over internal knowledge bases.
- Developed embedding pipelines and knowledge bases to improve AI context matching and retrieval accuracy.
- Reduced ETL runtime by **88%** (2 hrs to 15 min) by refactoring batch processing over **21M+ rows**.
- Automated deployment pipelines with **Apache Airflow**, **AWS Lambda**, and Python, saving 2+ hrs/release.
- Cut monthly infrastructure costs by **85%** by optimizing cloud resources and migrating to **AWS EC2**.

Projects

VisionBox — AI Security Camera System | github.com/AntonyI1/VisionBox   **Jan. 2026**
Python, PyTorch, YOLOv8, OpenCV, Flask, SQLite, FFmpeg

- Built an open-source AI surveillance system that detects people, vehicles, and animals on any IP camera.
- Trained a custom **YOLOv8** model end-to-end: data collection, annotation, training, and evaluation.
- Engineered a motion-first pipeline that idles **90%+** of the time, running inference only on movement.
- Implemented SORT multi-object tracking (Kalman filter + Hungarian algorithm) for persistent object IDs.
- Built a **Flask** REST API with **SQLite** for event storage, retention, and a live-streaming web dashboard.
- Deployed on real hardware with live camera feeds, automatic retention management, and event logging.

Technical Skills

Languages: Python, Go, JavaScript, TypeScript, SQL, C++, C#, Java
Backend: FastAPI, Node.js, Express.js, PostgreSQL, MongoDB, SQLite, REST APIs
Frontend: React, Next.js, TailwindCSS, HTML, CSS
Cloud & DevOps: AWS (EC2, Lambda, Bedrock), Azure, Docker, GitHub Actions, CI/CD, Git, Linux
AI/ML: PyTorch, YOLOv8, OpenCV, OpenVINO, RAG, FAISS

Education

University of California, Irvine   **Sep. 2021 – Jun. 2025**
Bachelor of Science in Software Engineering   *Irvine, CA*