Nhat Nguyen

LinkedIn : in/nhat82
Github : github/nhat82

Email : nhat.tm.ng@gmail.com
Mobile : +1-240-398-0776

EDUCATION

- **University of Maryland** — College Park, MD
  Bachelor of Science in Computer Science (Machine Learning Concentration) — Dec 2025
- **Honors**: GPA: 3.56 — Dean's List 2022, 2023
- **Courses**: Data Structures and Algorithms, Computer Systems, Object-Oriented Design, Artificial Intelligence, Machine Learning, Computer Vision

EXPERIENCE

- **University of Maryland** — College Park, MD, USA
  Tech Lead — Capstone Project — JavaScript, Python, Flask — Jan 2025 – May 2025
  - Spearheaded a **full-stack** web app with **custom AI classifying 1,400+ plant species**.
  - Filtered nearby plants with real-time geolocation data, **boosting accuracy to 80% from 65%.**
  - Built **backup AR plant identifier with 85% accuracy** ensuring uninterrupted engagement during outages.
  - Led client-facing testings weekly, ensuring 100% on-time feature delivery and technical alignment.

- **AICycle** — Hanoi, Vietnam
  Software Engineer Intern — Python, Tensorflow, PyTorch — Jun 2024 – Aug 2024
  - Engineered a **computer vision pipeline for license reading automation** by customizing YOLOv5, vietOCR, and FastAPI, to 80% accuracy and cutting data entry time by 50%.
  - Researched and implemented **vehicle damage detection** using edge detection, depth estimation, and segmentation algorithms with OpenCV and PyTorch.

- **Grassroots Grocery** — NYC, USA
  Software Engineer Intern — JavaScript, Airtable — Jun 2023 – Aug 2023
  - **Automated 400+ delivery-driver pairings** with zone restrictions and slot matching using JavaScript scripts in Airtable, reducing scheduling time by 80%.
  - Implemented a **concurrency-safe queue** to **resolve data racing** in Airtable, improving accuracy to 90%.
  - **Optimized SQL query** performance by refactoring slow scripts, decreasing execution time by 200ms per query.

- **Hack4Impact** — College Park, MD
  Software Engineer — TypeScript, JavaScript, React, Firebase — Aug 2022 - May 2023
  - Developed a case management tool matching 4000+ underserved families to services, building responsive admin interfaces with **React**, **Firebase**, and **Material-UI**.
  - **Migrated data workflows** from Google Sheets to MongoDB via Payload CMS, automating 200+ form submissions using JavaScript and Integromat.
  - Redesigned Hack4Impact's website with +10 **UI improvements**.

PROJECTS

- **Course Discovery**: Built a full-stack platform with user interest tracking and personalized recommendations using **Flask**, and **MongoDB**, got 30% increase in user engagement with recommended courses within first quarter.
- **GenAI Farmer Suggestion**: Built a FastAPI backend and GenAI prompt system for a crop alert platform, integrating Google Gemini API with a Vite-based frontend, resulting in alerts being generated in less than 3 seconds.
- **Feature Tracking**: Developed a Python-based image keypoint tracker using Harris Corner Detection, deployed via Flask APIs for interactive frontend access.

PROGRAMMING SKILLS

- **Languages**: Python, Java, JavaScript, SQL, Rust, HTML/CSS
- **Frameworks/Tools**: React, Node.js, FastAPI, Flask, MongoDB, Firebase, Docker, AWS
- **ML Tools**: TensorFlow, PyTorch, Pandas, Scikit-learn