Nick Trinh

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EDUCATION

Fordham University   Expected May 2027
BSc in Mathematics and Computer Science   ***GPA: 3.66/4.0***
- **Coursework:** Data Structures and Algorithms, Object-Oriented Programming, Database Systems, Data Communications & Networking, Introduction to Computer Science
- **Honors & Awards:** UBS Pitch Competition (3rd Place), Fordham Faber Award ($57k/year), Dean's List

EXPERIENCE

Software Engineer Intern   January 2025 – Present
StudyFetch   *New York, NY*
- Worked on a full-stack AI mindmap generator for visualized learning using **TypeScript**, **React**, and **Claude API**, processing **100+** study materials daily, generating connected concepts, and increasing user study retention by **32%**
- Developed an interactive AI toy that converses naturally using **RaspberryPi**, implementing offline STT, TTS, and local LLM inference with **llama.cpp**, increasing children's learning engagement across **30+** testers

Software Engineer Intern   October 2024 – December 2024
OHOS Media   *New York, NY*
- Collaborated with a team of 5 to build and deploy a scalable AI job application helper platform with **Next.js**, **Node.js**, **AWS**, and **MongoDB**, achieving **2000+** adoptions among Fordham students within the first year
- Built a resume and cover letter generation system using **OpenAI API** and **LangChain**, reducing application preparation time by **34%**, processing and generating **7000+** documents monthly for student job seekers
- Implemented ATS compatibility analyzer using **Python** to improve resumes, leading to **21%** higher ATS pass rates

AI Engineer Intern   June 2024 – August 2024
Rainscales   *Remote*
- Engineered **YOLO**-based computer vision system to monitor and track **1000+** alcohol-tested workers daily with **92%** accuracy in various conditions, while optimizing model size and inference time by **44%** with **TensorRT**
- Created Gradio GUI for model testing and inference, enabling non-technical team members to conduct tests and reducing feedback cycles, maintaining production-grade accuracy across **21** model versions
- Containerized deployment of AI models with **Docker** and **NVIDIA Triton Server**, improving projects scalability

Research Assistant   February 2024 – Present
Fordham Robotics & Computer Vision Lab   *New York, NY*
- Conducted research combining **Visual Place Recognition (VPR)** with **YOLO** for robotic navigation and visual homing, achieving **86%** accuracy in complex environments with dynamic landmarks
- Worked with 4 other researchers to develop autonomous robotic systems using **ROS2** and **C++**, enabling automated experimenting with high reliability in complex testing environments
- Improved research speed and performance by training and implementing various **neural networks** with **PyTorch**

PROJECTS

LinguaWealth (3rd Place UBS Pitch 2024) | *Python, AWS APIs, Azure APIs, OpenCV, OpenAI API*
- Developed an award-winning multilingual communication platform that helps wealth managers approach and communicate with international clients in real time with **88%** accuracy and winning **$3k** prize
- Implemented AI-powered sentiment analysis and natural language processing to extract actionable client insights, increasing wealth manager productivity and improving cross-cultural client communication effectiveness

E-commerce Website | *Node.js, React.js, Express.js, MongoDB, Stripe, Tailwind CSS*
- Built a complete online store platform with secure payment processing, user and seller accounts, and an administrative dashboard with a responsive and user-friendly shopping experience with analytics tracking
- Engineered the platform using **MERN** stack, implemented **Redis** caching with **JWT** authentication and **CRUD** operations and a storefront and admin dashboard using **React** and **Tailwind** with Stripe integration for checkout

AI Tutor with flashcards | *Next.js, React.js, MongoDB, Tailwind CSS, Claude API*
- Engineered an AI learning app featuring chat and flashcard functionalities for interactive and personalized quizzes
- Created an UI with dynamic study content generated from study materials, enhancing engagement and retention

TECHNICAL SKILLS

Programming Languages: Python, C++, C, JavaScript, TypeScript, Golang, HTML, CSS

Frameworks & Technologies: React.js, Next.js, Node.js, Express.js, Redux, MongoDB, PostgreSQL, Firebase, PyTorch, TensorFlow, OpenCV, OpenAI API, Claude API, Tailwind CSS, Redis, Git, Docker, AWS, ROS2, Linux