

DYLAN TRAN

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EDUCATION

Columbia University, New York, NY

Expected Graduation: May 2026

B.A. in Computer Science, Minor in Linguistics, GPA: 3.85/4.0

Relevant Coursework: Databases, Computer Vision, Computer Systems, Advanced Programming, Data Structures, Linear Algebra

Honors/Awards: John Jay Scholar (Top 7.5% of Admitted Class), Cyber NYC REU Fellow, FLAS Fellow

The American University in Cairo, Cairo, Egypt

Jan 2025 – May 2025

Spring Semester Exchange

Relevant Coursework: Operating Systems, Artificial Intelligence

Other Education: CodePath, Legal Outreach

TECHNICAL SKILLS

Programs & Tools: Intermediate: Git, Angular, PyTorch, MongoDB. Beginner: React, Tailwind CSS, Palantir Foundry, AIP

Languages: Advanced: Vietnamese, Arabic. Intermediate: Python, HTML/CSS. Beginner: JavaScript, TypeScript, C, C++, SQL

TECHNICAL AND RESEARCH EXPERIENCE

Cornell Tech, New York, NY – *Machine Learning Research Intern*

Jun 2025 – Present

- Selected for Google-sponsored research fellowship in Dr. Nikhil Garg's AI lab, serving as sole undergraduate on research team
- Built a dynamically updating sparse autoencoder (SAE) powering a concept-level browsing mode for Bluesky, generating interpretable features to support user-driven feed personalization and model emerging trends and topics in social media
- Designed continual-learning PyTorch framework with dynamic growth, boosting compute efficiency ~24x vs. static retraining
- Defined goals and evaluation metrics with PhD researchers to assess SAE interpretability and guide user study design

echo3D, New York, NY – *Software Engineer Intern*

Jun 2025 – Aug 2025

- Improved Angular asset control UI and restructured layout and rendering logic using TypeScript and HTML/CSS, adding a sortable file-type column, refining hover menus, and working with senior engineers to standardize styling across components
- Refactored AWS SDK in Java/Maven backend by itemizing dependencies, cutting artifact size by 68% and build time by 70%
- Prototyped 3D weather visualization in Flask streaming echo3D assets via Google <model-viewer> to demo platform use case

Annarabic, Casablanca, Morocco (*Remote*) – *Software Engineer Intern*

Sep 2024 – Feb 2025

- Designed and optimized a scalable Python web scraper API with Selenium, improving per-video latency by ~4.5x across 10,000+ hours of YouTube metadata for low-resource Swahili and Arabic NLP applications
- Planned for future work by analyzing system bottlenecks, scoping optimizations, and creating a product specification document
- Showcased "Transcribing WhatsApp Arabic Voice Messages" product demo at Columbia Data Science's 2024 Research Fair
- Facilitated partnerships with African governments to expand business operations into 3 countries, building new LLMs for minority African languages and leveraging proprietary technology to support humanitarian relief efforts (pending USAID)

CUCyber, New York, NY – *Cybersecurity Competitions Chair*

Oct 2022 – May 2024

- Led 50+ members in 9 national CTF competitions, coordinating social meetings for collaboration and attaining top placements
- Delivered technical workshops on malware creation with msfvenom, and on applications of cryptographic algorithms
- Hardened Windows VM system, performed traffic analysis on Wireshark, and combatted malware attacks from APTs in CCDC

The City University in New York, New York, NY – *Research Intern*

May 2023 – Aug 2023

- Investigated the neurocognitive impacts of social isolation on lexical retrieval abilities among elderly adults
- Refined experimental protocols by developing measures to study social networks, synthesizing 100+ scholarly articles, and leading subject recruitment with Drs. Loraine Obler and Amy Vogel-Eyny

PROJECT EXPERIENCE

SeekMarine, New York, NY – *App Developer*

Jun 2025 – Present

- Built a React + TypeScript application with Tailwind CSS serving species predictions from user-captured or uploaded photos
- Trained and deployed a FastAPI-served TensorFlow deep learning model to classify images of 23 marine species via CNNs

Palantir Technologies, Denver, CO (*Remote*) – *Winter Defense Tech Fellow*

Dec 2024 – Jan 2025

- Prototyped a Foundry dashboard concept to explore geospatial data integration for satellite tasking workflows, identifying and addressing data gaps to enhance military intelligence

Personal Portfolio Website, New York, NY – *Web Developer*

Oct 2024 – Dec 2024

- Developed a responsive portfolio website from scratch using HTML, CSS, and JavaScript

ADDITIONAL EXPERIENCE

Columbia Emerging Markets Society, New York, NY – *MENA Markets Analyst*

Feb 2024 – Present

Woodenfish Foundation, New York, NY – *Buddhist Sangha Education Study Tour Coordinator*

Mar 2024 – May 2024

The New York Academy of Sciences, New York, NY – *Junior Academy Team Leader*

Aug 2020 – Jun 2022