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: Engineering SaaS, ML for Genomics, Databases, Computer Systems, Linear Algebra, Data Structures
Honors/Awards: John Jay Scholar (Top 7.5% of 2026 Class), Cyber NYC REU Fellow, FLAS Fellow, *The Reed* First Prize Essay

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, PyTorch, MongoDB, Angular, NumPy. Beginner: React, Tailwind CSS, Palantir Foundry
Languages: Advanced: Vietnamese, Arabic. Intermediate: Python, HTML/CSS, JavaScript, TypeScript, SQL. Beginner: C, Ruby

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 over **2M+ social media posts**
- Designed continually-learning framework with **PyTorch** and **NumPy**, 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 (*Remote*) – *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, reducing artifact size **68%** and build time **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 with **Selenium** and **MongoDB**, improving processing latency by ~**4.5x** across **10,000+ hours** of YouTube metadata for low-resource Swahili and Arabic NLP applications
- Conducted bottleneck analysis and scoped optimizations, creating product specification document for reliability improvements
- Showcased "Transcribing WhatsApp Arabic Voice Messages" product demo at Columbia Data Science's 2024 Research Fair
- Facilitated partnerships with Columbia research group and African governments to expand operations into 3 countries, building LLMs for minority 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 collaboration meetings and achieving top placements
- Delivered technical workshops on malware creation with **msfvenom**, cryptographic algorithms, and security operations
- Hardened Windows VM system, analyzed network traffic on **Wireshark**, and combatted malware attacks from APTs in CCDC

City University of 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

Seek Marine, 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
- Enhanced model robustness to deep-sea conditions and detecting rare sea life by implementing underwater-specific data augmentations (turbidity, blur, color distortions, darkness), and few-shot learning with **PyTorch** and **Albumentations**

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**

LEADERSHIP EXPERIENCE

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