# DYLAN TRAN

dylan.g.tran@gmail.com (929) 327-8509 dt2758@columbia.edu

### **EDUCATION**

Columbia University, New York, NY

B.A. in Computer Science, Special Concentration in Linguistics, GPA: 3.92

Relevant Coursework: Databases, Advanced Programming, Data Structures, Linear Algebra, Discrete Math, Calc III, Arabic III

The American University in Cairo, Cairo, Egypt

Jan 2025 – Jun 2025

Expected Graduation: May 2026

Spring Semester Exchange

Anticipated Coursework: Operating Systems, Computer Vision

Other Education: CodePath, Legal Outreach, Brooklyn Friends School

Frameworks/Libraries: Intermediate: BeautifulSoup, TensorFlow, Beginner: scikit-learn, spaCy, pandas, PyTorch, OpenCV Technologies/Tools: Intermediate: Git/Github, Selenium, Excel, Kali Linux, Basecamp, Beginner: Lucidchart, Figma Languages: Advanced: Vietnamese, Arabic, Latin, Intermediate: Python, Java, HTML/CSS, Beginner: SQL, JavaScript, C, Swift

## **EXPERIENCE**

Annarabic, Casablanca, Morocco (Remote) – Software Engineering Intern, Artificial Intelligence

Sep 2024 – Present

- Optimized speech recognition LLM via data augmentation on dataset using PyTorch, pandas, and scikit-learn
- Developed scalable Python web scraper API with Selenium and bash, automating 1M+ hours of YouTube metadata extraction to expand low-resource Swahili language corpus and enhance model robustness for NLP applications
- Designed and delivered pitch deck and product demos, targeting client partnerships and pre-seed funding for business growth
- Presented "Transcribing WhatsApp Arabic Voice Messages" product demo at Columbia Data Science's 2024 Research Fair

Columbia GOP, New York, NY – Lead Engineer, Committee Member

Sep 2024 – Present

- Redesigned club webpage with Bootstrap and Figma prototypes to demo improvements and receive team feedback
- Integrated live Instagram feed and embedded sign-up form to streamline membership engagement and database management
- Engaged over 2,000 students in civic political dialogue by planning campus events and spearheading recruitment efforts

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

- 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 systems, performed traffic analysis on Wireshark, and responded to attacks from APTs in CCDC

The City University in New York, New York, NY – Neurolinguistics Research Assistant

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, aggregating 100+ scholarly articles, and assisting in subject recruitment with Drs. Loraine Obler and Amy Vogel-Eyny

Columbia Radio (WKCR-FM NY 89.9), New York, NY - Studio Engineering Intern

- Monitored audio engineering systems for nationwide live broadcasts, troubleshooting glitches to ensure quality transmission
- Assisted in developing full-stack library archive, digitizing and organizing metadata for 400+ CDs for database integration

#### PROJECT EXPERIENCE

SeekMarine, New York, NY – Co-Developer

Nov 2024 – Present

- Co-developed iOS application to identify marine species, utilizing Swift and Core ML for image recognition
- Trained and fine-tuned marine life dataset using OpenCV and TensorFlow, optimizing model for mobile deployment

Personal Portfolio Website, New York, NY - Developer

Oct 2024 – Present

- Designed responsive portfolio website from scratch using HTML, CSS, and JavaScript
- Integrated dynamic navigation, adaptive layouts, and interactive JS UI/UX components to enhance accessibility

Sentiment Analysis of AI in Africa, New York, NY – Researcher

Oct 2024 – Present

- Investigated AI prospects in Africa's emerging technology sector through sentiment analysis on existing literature
- Developed Python NLP pipeline using spaCy and TextBlob to parse and tokenize scholarly articles and assign sentiment scores

Database Lookup Server New York, NY - Programmer

Apr 2024 - May 2024

- Built custom web server in C, handling static content delivery and GET requests using the HTTP/1.0 protocol
- Integrated TCP connection with external mdb-lookup server, allowing database lookups and HTML table generation

## **OTHER AFFILIATIONS**

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

Columbia Vietnamese Students Association, New York, NY - Co-Treasurer

Feb 2023 - Nov 2023

The New York Academy of Sciences, New York, NY - Junior Academy Team Leader

Aug 2020 - Jun 2022