Alayna Nguyen

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EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Science

Graduating May 2025

- B.S. Computer Science · GPA: 3.863 / 4.0 · Dean's List
- C. Prescott Davis Scholar (Four Year Scholarship) · Columbia Alumni Association Scholarship
- Coursework: Computer Vision, Cloud Computing, Operating Systems, Networks, Robotics, Natural Language Processing, Algorithms, Artificial Intelligence, Programming Languages & Translators, Cryptography, Databases, Data Structures
- Extracurriculars: Women in Computer Science (Vice President), Columbia DivHacks (Hacker Experience Director)

EXPERIENCE

Netflix, Software Engineer Intern

5/23 - 8/23

- Built Live Editor cast guide templates and immersive title pages on Netflix's fan and publicity platform, <u>Tudum</u>, with GraphQL and Java within Domain Graph Service on the Member Innovation team in Member Experience Core Systems.
- Ensured server-driven UI consistency by consolidating action button display logic (Remind Me, Add to My List, Play), preventing leaks by granting control to editorial and engineering teams. Reduced time spent on cast guide workflows by 25%.
- Supported nested sections for pages with a depth-first search recursive approach, driving filterable sections and release dates.
- Simplified Tudum's architecture by migrating from redundant data models, enabling faster schema and feature innovation.

Columbia Speech Language Processing Group (Speech Lab), Research Assistant

1/23 - presen

- Automated code-switch and speech feature annotations (pitch, intensity, speech-to-noise ratio) for 100,000+ dialogue utterances in Miami Bangor (Spanish/English) and SEAME (Mandarin/English) corpora with Python and Praat.
- Extracted speech from background noise with Conformer-based Metric GAN and Audacity denoising models.

Salesforce, Software Engineer Intern

5/22 - 8/22

- Delivered changes in Java to Salesforce legacy core codebase as primary developer for 5 backend platform work items on the Unlocked Packaging Team. Served as primary QA engineer for 3 packaging work items.
- Built and documented Package2 BlackTab action, enabling support engineers to read / delete Package2 entities.
- Modified packaging limit logic, saving Salesforce partners up to 23 months of blocked waiting time for support cases.
- Wrote functional, smoke, and unit tests using JUnit and Mockito test frameworks to ensure 75% code coverage.

Jane Street, IN FOCUS Program Software Track

5/22 - 5/22

- Implemented OCaml methods to build a multiplayer Snake game application.
- 1st place in Electronic Trading Competition out of 20 participants by writing a Python Trading bot that uses arbitrage.

Columbia University Department of Computer Science, Undergraduate Teaching Assistant

1/22 - present

- Hosted 200+ hours of weekly office hour sessions for CSEE 3827 Fundamentals of Computer Systems (digital logic, state machines, MIPS, processor design, computer memory) and ENGI 1006 Introduction to Computing (Python, algorithms).
- Reviewed submitted code to assess functionality for labs, midterms, and final exams for 600+ students.

University of Illinois Chicago Human-In-Mind Engineering Research Lab, Research Assistant

5/21 - 9/21

- Programmed levels of human-robot collaboration with Universal Robots, OnRobot, and Leap Motion sensors.
- 2nd Place in Human Factors and Ergonomics Society Human–AI–Robot Teaming Video Contest.

SKILLS

Java, Python, SQL, GraphQL, HTML, CSS, JavaScript, C, Linux, Google Apps Script, Git/GitHub, MIPS Assembly Language

PROJECTS

Hackathon Projects

- 1st place and Best Use of Estuary (decentralized file storage) at HackPrinceton for Art Hub web-app (HTML, CSS, JS)
- Best Use of FeatureForm at UC Berkeley Artificial Intelligence Hackathon for Mediglot web-app (Flask, GPT-4)
- 1st place at Creatica Hackathon for Mind Galaxy web-app (HTML, CSS, JS)
- 1st place at HarmonyHacks for Neighbor Mart app (Flutter, Dart)
- 2nd place at RookieHacks for <u>OSafe</u> app (Flutter, Dart)
- Best UiPath Automation Hack at PixelHacks for Vitality web-app (HTML, CSS, JS)

Technology Projects

- 1st place in NASA TI Codes Contest, programmed sanitation robot for the International Space Station
- Congressional App Challenge 2021 Winner in Illinois' 11th District for Mission: Xplore Science web-app