

Phillip H. Dinh

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EDUCATION

Swarthmore College

Swarthmore, PA

Bachelor of Arts in Computer Science and Mathematics; GPA: 3.95

May 2026

- **Skills:** Problem-Solving, Optimized Solutions, Security Best Practices, User Interface Design, Data Organization, Efficient Data Handling, Algorithm Design, Data Protection, Privacy Awareness, Problem Decomposition

EXPERIENCE

IBM Accelerate Software Track Fellow

June - Aug 2024

IBM

Remote

- Enhanced software development proficiency through intensive training in data structures, algorithms, full-stack development, and cloud-native technologies. Implemented unit testing to ensure code reliability and maintainability.
- Improved project outcomes through Agile methodologies, fostering collaboration and enhancing skills in project management and communication.

Comcast Innovation Fund Researcher

May - Aug 2024

Swarthmore College, MIT

Swarthmore, PA

- Leveraged **Python (Pandas, Matplotlib, NumPy)** to identify anomalies within Cloudflare's network measurement datasets, utilized Measuring Broadband America (MBA) data as a benchmark for comparison.
- Uncovered significant disparities in various measurements within Cloudflare's network data, which supported our hypothesis that hindering factors (i.e. web browsers) are causing unusually large outliers.
- Documented Python queries, generated graphs, and findings on GitHub for transparency and reproducibility.

Swarthmore College Computer Society Engineer

Jan 2023 - Present

Swarthmore College

Swarthmore, PA

- Co-engineered Cygnet.v2 (a 1,600+ student database) that improved search times by 83% by utilizing **Next.js** server-side rendering to filter data with **SQL** queries. Simplified code and improved UI through **React** components and **Tailwind CSS**.

Google Developer Student Club Lead

Sept 2022 - Present

Swarthmore College

Swarthmore, PA

- Directed a leadership team of 6 students for a 100+ member club, organizing workshops that taught developer technologies (such as **JavaScript**) through projects, with the goal of growing students' experience with modern programming technologies and preparing them for technical roles.
- Assistant developer to "Worthmore" (an online trading place for 1,600+ students on campus). Updated front-end to create a smoother UX and worked on back-end to ensure proper server work.

Columbia University's AI4ALL Scholar

June - July 2021

AI4ALL Program

Remote

- Developed traffic prediction AI algorithm using machine learning, **Python**, **NumPy**, and **Pandas**.
- Analyzed underlying bias within artificial intelligence through an interdisciplinary lens. This led to reflection on how to be more conscious about the biases within my AI.

PROJECTS

VlogNow | *JavaScript, React Native, Google Firebase*

May 2023 - Present

- Social media app that encourages users to post daily 5-second videos.
- Built back-end using Google's **Firebase** (authentication, Firestore, storage). Implemented cache to reduce bandwidth usage and improve data retrieval time.

At-Home Cafe | *Python, TKinter, Google Calendar API, ZenQuotes API*

Aug 2023 - Present

- **Python** app that adds a task to the user's Google Calendar and provides motivational quotes from ZenQuotes.
- Designed minimal interface using a **TKinter** library.

TECHNICAL SKILLS

Languages: Python, JavaScript, C++, C, Swift

Frameworks/Libraries: React, Next.js, React Native, Node.js, Pandas, NumPy

Certifications: IBM Accelerate - Software Developer, App Development w/ Swift Certified User