

# Thanh Hang Pham

hang.pham@princeton.edu • (832) 881-1326

[thanhhang1306.github.io/portfolio/](https://thanhhang1306.github.io/portfolio/) • [github.com/thanhhang1306](https://github.com/thanhhang1306) • [linkedin.com/in/hangp/](https://linkedin.com/in/hangp/)

## EDUCATION

Princeton University | Princeton, NJ

Aug. 2022 – May 2026

Computer Science, B.S.E.; Minors: Statistics & Machine Learning, Finance

GPA: 3.89/4.00

- **Relevant Coursework:** Machine Learning, Algorithm & Data Structure, Programming Systems, Probability & Stochastic Systems, Linear Algebra, Calculus III, Entrepreneurship.
- **Leadership Roles:** Princeton Data Science, IgniteSTEM, Women in STEM, TigerApps, ACM, Student Gov.

## SOFTWARE ENGINEERING EXPERIENCES

Quantitative Trading Intern | [Virtu Financial](#) | New York, NY

January 2024

Python • Database Visualization Tools

- Created and presented a trading strategy to senior members of Virtu through a risk-reward model and multiple predictive models with data analysis and market research.

Software Engineer | [The Daily Princetonian](#) & [Hack4Impact](#) | Princeton, NJ Jan. 2023 – Present

React/React Native • NodeJS • Flask/Flask-RESTful • PostgreSQL (AWS RDS) • Google Firebase

- Implement dynamic data templates and web components like the photography archive and New Jersey Tree Foundation site.
- Manage backend operations for in-app advertisements on the Campus pages of the mobile app for The Daily Princetonian.

Software Engineering & Machine Learning Intern | [Ticket Wallet \(startup\)](#) | Remote May 2023 – Nov. 2023

Django/Django REST • Flutter • PostgreSQL (AWS RDS) • AWS EC2, S3, SageMaker • Docker • PyTorch

- Built multi-modal models with time series data and NLP for high-stakes real-time decision-making.
- Created RESTful endpoints to perform CRUD operations for authorized users on data from PostgreSQL databases.
- Contributed to the UI design, development, and testing of the website and mobile application.

Software Engineering Intern | [Aspiritech](#) | Evanston, IL

June 2023 – July 2023

React • Flask • PostgreSQL • JavaScript (Chrome extension)

- Developed a dashboard-style website with state-of-the-art security to improve the workflow of testers and clients.
- Programmed a Google Chrome extension to aid in quality assurance testing compliant with WCAG 2.1 standards.

Software Development Intern | [Vietnam National University](#) | Hanoi, Vietnam

June 2022 – Aug. 2022

React • NodeJS • MongoDB • MySQL

- Collaborated with Professor Trien and his team of students to develop a live website for graduate students.
- Processed sensor data and live footage of plants, integrating the data into MongoDB and MySQL databases.

## SOFTWARE DEVELOPMENT PROJECTS

SnapShot & TRU – To Remember U | Website | Team-based

June 2022

- Developed websites using NLP to summarize/showcase daily news and autogenerate bibliography through audio recordings.

VietFood | Mobile Application | Individual

Feb. 2021 – May 2022

- Built a mobile platform targeting Houston's Vietnamese community, where users share and rate recipes.

BoxOut & AstroGhost | Video Game | Individual

Dec. 2020 – April 2022

- Designed, programmed, and deployed a puzzle game titled *BoxOut* and an RPG game titled *AstroGhost* with Java.

## EXTRACURRICULAR

Research Assistant | [Intelligent Robot Motion Lab](#) | Princeton, NJ

Aug. 2023 – Present

- Collaborate with Ph.D. students in uncertainty alignment for large language model planners within [robotics](#).

Undergraduate Course Assistant | [Department of Computer Science](#) | Princeton, NJ

Feb. 2023 – Present

- Grade over 400 works from students taking 'COS226: Data Structure and Algorithm across seven assignments.

Digital Learning Lab Specialist | [Digital Learning Lab](#) | Princeton, NJ

Sept. 2022 – Present

- Provide technical assistance in computer programming, data analysis/visualization, and video/audio production.
- Lead workshops on typographic art creation and design with Adobe Illustrator (intermediate level).

## SKILLS

**Programming Languages:** Java, Python, JavaScript, TypeScript, C++, C, SQL, R, HTML, CSS, Assembly ARMv8.

**Frameworks / Technologies:** ReactJS/React Native, NodeJS, Express, Django, Flask, Android Studio, Flutter, MySQL, PostgreSQL, MongoDB, AWS, Firebase, PyTorch, TensorFlow, Docker, Linux, Git, Adobe Illustrator, Figma.