# **Thanh Hang Pham**

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#### **EDUCATION**

Princeton University | Princeton, NJ

Aug. 2022 - May 2026

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

GPA: 3.92/4.00

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

#### **SOFTWARE ENGINEERING EXPERIENCES**

#### Software Engineering Intern | Meta | Menlo Park, CA

May 2024 - Present

*Python • Software Infrastructure Tools • Machine Learning Tools* 

• Collaborate as part of the AI Infrastructure team to design and develop an internal tool for automating bulk customizations of AI models. Implement dashboards to enhance user experience and create comprehensive unit testing to ensure functionality.

### 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 • PostgreSOL (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 on data from PostgreSQL databases for authorized users.

#### 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 & gerr.ai | Websites | Team-based

June 2022 - Present

Developed websites with NLP to condense daily news, autogenerate bibliography through audio, and detect gerrymandering.

#### 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

- Second author on Risk-Calibrated Human-Robot Interaction via Set-Valued Intent Prediction.
- 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 800 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.