# Phi Henry Nguyen

817-404-7116 • hpnguyen@alumni.cmu.edu • phihenrynguyen.com

## **PROFESSIONAL EXPERIENCE**

#### Software Engineer • Lucera Financial Infrastructures

- NEW YORK, NY MARCH 2024 PRESENT - Building full stack applications for LumeMarkets trading systems and the FMX Futures Exchange, launching summer 2024
- Developing core engineering projects such as client-focused customizable UI theming and core React component libraries

#### Software Engineer • Schonfeld Strategic Advisors

- Developed key features to improve UI/UX of the firm's Risk Portal in React and Spring Boot, including a data-obfuscation mode to enable privacy during demos and server-driven configurations to optimize data rendering and scalability
- Built time series risk factor charts providing performance and exposure analysis though multiple levels of data granularity
- Implemented robust error handling in Python risk decomposition API for enhanced server reliability and usability

#### Software Engineering Intern • Schonfeld Strategic Advisors

- Worked directly with the Risk Technology Applications team to develop interactive machine learning models and time series data visualization tools for 100+ portfolio managers and analysts using Javascript, React, Python, Java, and kdb+
- Refactored React Redux store to improve portal loading speed and reduce unnecessary component rendering by over 90%
- Built APIX.XL APIs to handle bulk requests and significantly reduce number of kdb+ queries needed to build Excel models

#### Full Stack Software Engineering Intern • Cisco Meraki

- Developed a user workflow with React and Rails in Meraki Dashboard to enable data collection of consumer cameras for video object detection training and increased the flow of user-generated training data for camera ML models by over 500%
- Integrated end-to-end testing with Javascript and Cypress into the Meraki Vision Portal's Gitlab CI/CD pipeline

#### Software Development Engineer Intern • Amazon

- Designed and led development of an internal web scraping tool with functionality to annotate and extract features from HTML web pages for the Alexa AI Web Information team; built and deployed with Flask, DynamoDb, and AWS Lambda
- Improved information extraction and data collection speeds over other tools by over 10 times through extensive testing

#### Software Developer • PatchRx

- Redesigned client-side data management and the SMS notification system for patient prescription adherence software
- Built mobile app onboarding process with biometric authentication and engineered a virtual assistant messaging interface

## **OTHER EXPERIENCE**

#### 17-437 Teaching Assistant • CMU School of Computer Science PITTSBURGH, PA • JANUARY 2023 - MAY 2023

- Hosted office hours for topics in Django web application development and mentored course capstone project groups
- 67-272 Head Teaching Assistant CMU Information Systems Department PITTSBURGH, PA • JANUARY 2022 - MAY 2022
  - Led lab sessions and office hours covering key topics in web application design and development using Ruby on Rails

#### 15-112 Teaching Assistant • CMU School of Computer Science

- Prepared for course virtualization by writing test case autograder scripts in Python and converting course notes to LaTeX
- Taught recitations of 30+ students covering fundamental programming and computer science topics in Python and Go

## **EDUCATION**

#### Carnegie Mellon University • GPA: 3.82

B.S. Information Systems, Additional Minors in Computer Science, Software Engineering, and Human Computer Interaction Coursework: Computer Systems • Software Construction, Design, & Concurrency • Application Design & Development • Designing Human Centered Software • Software Engineering for Startups • Functional Programming • IS Consulting Project Activities: Booth Chair • Asian Students Association Vice President • Sigma Phi Epsilon Fraternity • 180 Degrees Consulting

## **SKILLS**

Programming Languages: Python • TypeScript/JavaScript • Java • SQL • HTML/CSS • C • C++ • Ruby • Go • COBOL Frontend Technologies: React • Highcharts • AG Grid • TanStack • Zustand • Redux • Stitches • Storybook • WebSocket Backend Technologies: Spring Boot/WebFlux • Flask • Django • MongoDB • Ruby on Rails • Amazon Web Services • TeamCity

#### SEATTLE, WA • MAY 2021 - AUGUST 2021

NEW YORK, NY • JULY 2023 - DECEMBER 2023

NEW YORK, NY • JUNE 2022 - AUGUST 2022

SAN FRANCISCO, CA • AUGUST 2021 - DECEMBER 2021

#### VIRTUAL • DECEMBER 2020 - DECEMBER 2021

PITTSBURGH. PA • AUGUST 2019 - MAY 2023

PITTSBURGH, PA • JANUARY 2020 - DECEMBER 2020