Matthew Pham

matthewpham55@gmail.com | (408) - 886 - 1519 | linkedIn/matthewdpham | github/matthew-pham | matthewpham.me

EDUCATION

Bachelor of Science in Computer Engineering   Urbana, IL | Aug 2018 - May 2022
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
GPA: 3.6
Relevant Coursework: Algorithms & Models of Computation; Artificial Intelligence; Computer Systems Engineering; Computer Networks; Database Systems; Data Mining; Data Structures

PROFESSIONAL EXPERIENCE

CAPITAL ONE | SOFTWARE ENGINEER INTERN   McLean, VA | Jun 2021 – Aug 2021

- Designed and implemented a language model using word embedding and natural language processing techniques to classify sensitive customer information.
- Increased language model accuracy from 85% to 96% with cross-validation and hyperparameter tuning, reducing the false positive prediction rate.
- Gave a talk on creating a basic neural network in **PyTorch** to a panel of interns, software engineers, data engineers, and engineering managers.
- Developed machine learning models using **PySpark** and **PyTorch** and managed data using **AWS S3** and **Snowflake**.

HAYWARD QUARTZ TECHNOLOGY | SOFTWARE ENGINEER INTERN   Fremont, CA | Jun 2019 - Aug 2020

- Wrote scripts using **AutoIT** to automate some of the sales department's tasks.
- Cut purchase order and sales order processing time by 80%, saving the company 16 hours per week.
- Developed an inventory management system so that raw materials could be tracked throughout the manufacturing & machining process.
- Updated the raw material tracking application's UI using **Node.js**, **Chart.js**, **Electron**, **node-adodb**, **Microsoft Access**, and **Selenium**.

UNIVERSITY OF ILLINOIS | CS 125 COURSE ASSISTANT   Urbana, IL | Aug 2019 - Dec 2019

- Assisted a weekly lab section as well as held weekly office hours to help and engage students.
- Introduced novice programmers to basic computer science concepts.
- Advised students on the best path through the UIUC CS program based on their interests.

PROJECTS

TANGRAM ⬈   FLUTTER, PYTHON, AWS, MYSQL, NEO4J
A location-based social media application on iOS and Android where users post videos based on their location and swipe in 4 directions to navigate the world. The app provides for a hyper-local social media experience, where content is tailored to events happening around the user.

MECHMANIA STATS CLI TOOL ⬈   VERCEL, NODE.JS, TYPESCRIPT
A command-line command that allows participants of the annual student-run MechMania hackathon to view the performance of their bot throughout the event. The goal of the hackathon is to develop a bot to play a game that is unveiled at the opening ceremony.

WINDOWS 9 ⬈   C, x86 ASSEMBLY
A Linux-inspired Operating System with a Windows-inspired GUI. Built from the ground up, the OS includes features such as mouse and keyboard input, a memory allocator based on Linux's buddy allocator, kthread support, and the ability to draw .bmp images loaded from the filesystem to the screen.

SKILLS

Languages: Java, C/C++, Python, PHP, SQL
Web Development: React, Node.js, TypeScript, HTML/CSS
Technology: Git, AWS, PySpark, PyTorch, Databricks, Apache, LaTeX, MongoDB, Snowflake, Neo4j, Selenium