Huy Hoang

hbhoang@umass.edu | 8578698982 | github.com/huy2512hcm

EDUCATION

Amherst, MA University of Massachusetts Amherst Sep 2018 – December 2022

Bachelor of Science | Majors: Computer Science, Mathematics; GPA: 3.84

- Member of Commonwealth Honor College, Departmental Honor
- Courses taken: Object Oriented Programming, Data Structures and Algorithms, Web and Mobile Development, Operating Systems, Introduction to Computation, Programming Methodology, Computer Networks, Artificial Intelligence, Information Systems, Machine Learning, Information Retrieval

WORK EXPERIENCE

Nuance Communications Inc. (Microsoft)

Software Engineer Intern – Cloud Platform

• Digital Engagement Platform Team

Burlington, MA May 2021 – August 2021

Cybozu Inc.

Software Engineer Intern - Core Dev and Infrastructure

Ho Chi Minh City July 2020 – August 2020

- Developed a MongoDB database that can process up to **millions** of real time group records, implemented a caching design to handle duplication which reduces memory usage by over **30 times**, from **8GiB** to **256MiB**.
- Developed a large-scale web application for **distributed** system where users can manage food orders within groups. Handled frontend and backend using React/Redux and Node.js, HTTP with REST APIs.
- Deployed the developed applications on Heroku and integrated CircleCI to automate scaling and update.
- Technologies: Node.js, npm, Express.js, React/Redux, MongoDB, Redis, Heroku, Webpack, Babel

University of Massachusetts Amherst

Undergraduate Research Assistant

Amherst, MA

Jan 2020 - Present

- Under the supervision of Professor Marco Serafini in the Data Systems lab.
- Integrated Deep Graph Library to accelerate graph sampling for graph machine learning using GPUs.
- Technologies: Python, C++, CUDA, TensorFlow, dgl

Undergraduate Teaching Assistant

Sep 2019 – Present

- Courses: Computer Networks Fall 2021, Reasoning Under Uncertainty Fall 2020, Spring 2021, Introduction to Problem Solving Fall 2019.
- Duties: Organized weekly labs with 50 students and hosted office hours, graded homework and exams, led a team of four other TAs.

Nordic Coder

Ho Chi Minh City

Software Engineer Intern – Full Stack Web Development

May 2019 – August 2019

- Built an ecommerce website that manage online and offline coding courses for more than 1000 users using PHP and MySQL.
- Built a subsystem where the company can generate event invitations and customers can receive those invitations.
- Automated the gift vouchers sending process, which reduced the order processing time from around 1 hour to at most 60 seconds.
- Technologies: PHP, MySQL, HTML/CSS, WordPress, Google Cloud

PROJECTS

Android Market (2020): A comprehensive analysis of the Android app market by comparing over **10000** apps in Google Play across different categories, using **Python** and **pandas**, **matplotlib**, **NumPy** libraries.

Math bot (2019): Built a system that can communicate with servers and solve the math problems that the server sends using C and Linux socket API

Online Swiping (HackUMass 2019): Built a web application that supports swipe up and check for meal plans before eating at the dining halls. Users can also keep track of the number of meal swipes left and the record of their frequencies of visits for each dining hall. Used **HTML/CSS/JavaScript, Python**.

HONOR AND AWARD

Dean's International Scholarship for 7 international students with exceptional record and leadership August 2020 **Dean's List:** 2018/2019. 2019/2020

SKILLS

Programming Languages: C/C++, Python, Java, Go, JavaScript/ES6, R, MySQL, HTML5/XML, CSS

Technologies: Spark, Kafka, Redis | Node, React, Angular | PostgreSQL, MongoDB | scikit-learn, PyTorch, TensorFlow

Others: Git, Linux, Docker, Kubernetes, Azure, AWS