Tieu Hoang Huan Pham

Mineola New York, NY 11501 (347) 414-6644 • josephpham1406@gmail.com

EDUCATION

Hofstra University, Fred DeMatteis School of Engineering and Applied Science, Hempstead, NY Bachelor of Science (Honors with Distinction), Computer Science and Mathematics: Dean's list – all terms; GPA: 3.8 December 2023

Relevant Coursework: Abstract Algebra I, Real Analysis I, Probability and Statistics II, Linear Algebra, Algorithm and Design Analysis, Introduction to AI, Introduction to Programming Languages

HONORS AND GRANTS

Graduated summa cum laude (2023) Computer Science and Mathematics Departmental Honors (2023) Phi Beta Kappa (2023) Pi Mu Epsilon (2023) Pi Mu Epslion (2023) Hofstra University Provost Scholarship (2020)

RESEARCH EXPERIENCE

Hofstra University, Zucker School of Medicine

Research Assistant, Summer 2023

Advisors: Professor Mainu John, Professor Yihren Wu

Applied Generative Adversarial Networks (GANs) to neuro-imaging for Schizophrenia classification using raw 4D functional MR data. Tested various GAN models, while addressing the challenge of deriving 2D slices from 4D tensors.

Hofstra University, Computer Science Department

Research Assistant, Summer 2023

Advisor: Professor Jianchen Shan

Expanded the use cases of Gemini, a subsystem engineered to realign misaligned huge pages. Designed test cases to assess its efficacy under complex scenarios such as memory deduplication, memory ballooning, and swapping.

Hofstra University, Computer Science Department

Honors Thesis, Spring 2023

Advisor: Professor Richard Puerzer, Professor Andrew Lane

Explored the application of machine learning in the mortgage sector. Employed statistical analysis, particularly the chi-square test, to investigate mortgage approval rates across different demographics in New York. Key findings revealed algorithmic biases that underscored the critical need for equitable technology practices within the financial sector to prevent systemic discrimination.

PUBLICATION

Examining Biases in AI in the Mortgage Sector

with Andrew Lane

in ICMLA (International Conference on Machine Learning and Applications), 2023 - weakly accept, borderline, weakly reject, reject

TEACHING EXPERIENCE

Hofstra University, Computer Science Department

Tutor, September 2022 – December 2023

Guided students on all first-year computer science courses (CS14,15,16,17,24,110,112), covering core concepts and practical applications. Adapted teaching methods to meet diverse student needs, ensuring understanding of both foundational and emerging topics. Assisted students in breaking down complex coding questions for methodical problem-solving. Reviewed and provided feedback on students' coding solutions to improve correctness and performance.

Hofstra University, Mathematics Department

Tutor, September 2022

Conducted personalized 1-1 tutoring sessions, adapting approach to each student's unique needs and learning styles for quizzes and exams preparation. Assisted students in tackling challenging math problems through visualization techniques, aiding in the comprehension of abstract concept.

PROFESSIONAL EXPERIENCE

Navitas - London

Intern, Summer 2019

Successfully designed and executed a data collection project. Enhanced the company's understanding of its target audience by assisting in the creation of a comprehensive framework which utilized Google Surveys for data gathering. Addressed and met client-specific needs by delivering tailored, efficient, and reliable solutions in collaboration with the team. Improved team communication and project outcomes by actively participating in team discussions and feedback sessions, learning effective and concise communication.

Nhu Hai Cat Tuong Co., LTD - Ho Chi Minh

Chief Technology Officer, Summer 2023

Led the launch of my family tea business by crafting a comprehensive business plan covering all operational facets from production to consumption. Conducted industry analysis using Python and Matlab for data analysis, and developed web scraping tools to gather essential data. Employed logistic regression and random forest models for industry trend forecasting, aiding in precise supply and demand strategizing. This initiative not only positioned the business effectively within the industry but also translated academic learnings into practical business solutions.

OTHER EXPERIENCE

Hofstra University, Zarb School of Business

Student Managed Investment Fund (SMIF), Fall 2023

Presented analysis and investment recommendation of ESG focused ETF stocks to Hofstra's SMIF Supervisory Board, alumni and investment practitioners. Resulted in the purchase of VHT stocks which makes up 19% of the ESG portfolio.

CERTIFICATION

Bloomberg ESG – December 2023 Bloomberg Finance Fundamentals – December 2023 Bloomberg Market Concepts – December 2023

TECHNICAL SKILLS

Computational: Eclipse, MS Visual Studio, Oracle VM Virtual Box, MATLAB, Pandas, NumPy, Pytorch, Keras, Excel, TensorFlow, Scikit-Learn, Seaborn, Matplotlib

Coding languages: Python, C++, C#, C, Java, F#, Rust, Perl

LANGUAGES

English (fluent) Vietnamese (native)

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TEACHING EXPERIENCE

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