Nhi Pham

Saadiyat Island, Abu Dhabi, UAE | nhi.pham@nyu.edu | GitHub | LinkedIn | +971 56 641 7632

EDUCATION

New York University | Abu Dhabi, UAE (4% admit rate)

Sep 2018 - May 2022 (expected)

Bachelor of Science in Computer Science - Applied Mathematics

Cumm. GPA: 3.98/4.0

Abroad Semesters: Nepal (J-term 2019), New York (Summer 2019), Shanghai (J-term 2020)

Programming: Java, C/C++, Python, Javascript, HTML, CSS, SQL, MATLAB

Certificate: D3.js Essential Training for Data Scientists (certificate), PyTorch Essential Training: Deep Learning (cer-

tificate), TensorFlow 2.0 Masterclass: Hands-On Deep Learning and AI (in progress, course note)

RESEARCH EXPERIENCE

NYU Courant Summer Undergraduate Research Experience

(remote 35 hours/week) New York, US

Research Intern, supervisor: Professor Esteban G. Tabak

May 2020 - Present

- Work on latent factor discovery through optimal transports, specifically focused on Markov processes
- Generate synthesis data for methodology evaluation and design exploratory experiments in Python and MATLAB

Computational Analysis and Machine Learning

Abu Dhabi, UAE

Research Intern, supervisors: Professor Carlos Guedes and Kaustuv Kanti Ganguli

Feb 2020 - June 2020

- Performed musical feature extraction and worked on melodic similarity, which included modeling predominant melody via distributional and structural representations and associated distance measures
- Developed and implemented the computational analysis of non-western music collections, and conducted exploratory data analysis in Python by using dimensionality reduction and visualization with t-SNE

Undergraduate Student Independent Research

Abu Dhabi, UAE

Supervisors: Professor Alberto Gandolfi, Professor Shakeel Kazmi

Jan 2020 - May 2020

- Developed a system of a portable device that classifies the waste in real-time using convolutional neural networks. Find the code and the research paper here
- Research paper selected by the UAE Federal Competitiveness and Statistics Authority and granted Intellectual Property rights by the Ministry of Education
- Poster presentation at Grace Hopper Celebration 2020

NYU Tandon Undergraduate Summer Research Program

New York, US

Research Intern, supervisor: Professor Eugene Callahan

Jun 2019 – Aug 2019

- Refined and improved Indra Agent-based Modeling for environmental and financial market models in Python
- Analyzed and conducted automated unit testing in Python, which simulated the actions and interactions of autonomous agents to assess their effects on the system
- Increased testing coverage from 40% to 90% and developed Web front-end using React framework

VOLUNTEER EXPERIENCE

Technology Career Panelist | NYU Abu Dhabi

Abu Dhabi, UAE

Gave insight into research, internship and scholarship opportunities and their application process

Oct 2020

Unconscious Bias Team Leader | WeSTEM (Women empowered in STEM)

Abu Dhabi, UAE

Raise awareness about unconscious bias in STEM through #IAmRemarkable campaigns, interview Jan 2020 - Present preparation workshops, and women in tech panels on campus

Event Coordinator | HackAD

Abu Dhabi, UAE

Assisted in organizing events for students interested in Computer Science, including the annual Sep 2019 - May 2020 Hackathon for approx. 50 participants

Treasurer | Math Club

Tutor

Abu Dhabi, UAE

Assisted in organizing trainings and selection tests for students interested in Math

Jan 2019 - May 2019

OTHER EXPERIENCE

Unix Lab - NYU Abu Dhabi

Virtual

Sep 2020 - Present

- Assist approx. 30 students/week on computer assignments and projects
- Maintain a virtual shared learning space for computer science and engineering students

Fellow

Virtual

Jun 2020 - August 2020

• Selected to attend the exclusive invite-only 8 week long Get Ahead program by Google for people who self identify as females, to develop their technical skills through a series of workshops and code challenges

JPMorgan Chase Software Engineering Virtual Experience

Virtual Jun 2020

Participant

• Participated in an open access JPMorgan Chase virtual experience program, familiarized with JPMorgan Chase

frameworks and applied technical skills to a hypothetical request from the fam's trading floor to apply a part of the

• Participated in an open access JPMorgan Chase virtual experience program, familiarized with JPMorgan Chase frameworks and applied technical skills to a hypothetical request from the firm's trading floor to analyze and visualize data

• Completed the following online modules: Interface with a stock price data feed, Use JPMorgan Chase frameworks and tools, and Display data visually for traders (certificate)

Google Inside Look 2019
Attendee

Munich, Germany
Sep 2019

 Selected as one of only 31 students from thousands of applicants across EMEA to attend Google's fully-funded Inside Look 2019 program in Munich, Germany, participating in technical and developmental content and workshops

Onatech New York, US

Part-time Data Analyst Intern

Jun 2019 - Jul 2019

- Applied different analytics models, including simple/exponential smoothing, Holt, Holt winters, ARIMA, and ARMA to forecast sales and quantity of food products
- Developed sales forecast models in Python and visualized the results using Matplotlib. Find the code here

PROJECTS

Underwater Experience - Alternate Realities | April 2020 - May 2020

Abu Dhabi, UAE

This alternate reality project is created with the hope to connect our daily life actions and their negative impact on the ocean, embracing the message of the inter-relation between human daily activities and nature. Find the documentation here

Weather Collectors | Nov 2018 - Oct 2019

Abu Dhabi, UAE

Constructed portable weather stations and a cloud-based tracking app in a team of 3 to update weather status in Ho Chi Minh City local areas, Vietnam

Health Data Visualization | Jan 2020

Abu Dhabi, UAE

Visualized healthcare related data using Javascript and D3.js version 4. Find out the project here

AWARDS & DISTINCTIONS

2020	International	AnitaB.org Grace Hopper Celebration Scholarship Recipient
2020	International	Tapia Conference - NSF Scholarship Recipient
2020	School	NYU Abu Dhabi Undergraduate Summer Research Funding Awardee
2020	School	NYU Courant Undergraduate Research Grant
2020	Gulf Region	NYU Abu Dhabi Official Team - Gulf Programming Competition 2020
2019	International	Platinum Prize (top 2/578 teams) HackHarvard Global Hackathon
2019	School	NYU Tandon Undergraduate Summer Research Funding Awardee
2018	School	NYU Abu Dhabi 4-year full-ride scholarship recipient
2018	Top 99/225	Al-Khwarizmi International Mathematics Olympiad for Undergraduate Students
2017	Regional	Third place in Vietnam Mathematics Contest for Gifted Students
2017	Top 10%	Le Hong Phong High School for the Gifted Merit 3-year Scholarship