YANNI ETCHI

www.linkedin.com/in/yanni-etchi | Chapel Hill, NC |
(919)917-2556 | yannietchi@gmail.com

EXPERIENCE

MACHINE LEARNING RESEARCH INTERN

University of Massachusetts | Dartmouth, MA

JUNE 2023 – AUGUST 2023

Trained and tested regressive models using molecular data for solubility optimization of redox active material of non-aqueous redox flow batteries. This was accomplished by using a wavefunction analyzer to calculate the properties of 500 new molecules, of which their acetonitrile solubility was predicted using the trained models.

MATH AND PHYSICS HELP CENTER TUTOR

University of North Carolina at Chapel Hill | Chapel Hill, NC

AUGUST 2023 – JUNE 2024

Consistently simplify intricate concepts and adapt lessons to individual student requirements to ensure mastery of mathematical principles, enhancing problem-solving skills and overall academic progress.

DATA SCIENCE RESEARCH INTERN

Wake Technical Community College | Raleigh, NC

AUGUST 2022 – MAY 2023

Analyzed and visualized a decade worth of census data to identify trends and patterns in education attainment amongst demographics in the United States.

EDUCATION

BACHELORS OF SCIENCE IN COMPUTER SCIENCE AND APPLIED MATHEMATICS (DOUBLE MAJOR)

University of North Carolina at Chapel Hill | Chapel Hill, NC

JUNE 2025

- Relevant Coursework: Analysis of Data Structures, Applied Linear Algebra, Discrete Math (Combinatorics and Number Theory), Differential Equations

ASSOCIATES OF SCIENCE IN COMPUTER SCIENCE

Wake Technical Community College | Raleigh, NC

MAY 2023

- GPA 3.8. | Senator of Student Government Association | Honors Program | President's list

RELEVANT PROJECTS

IMAGE CAPTIONING USING DEEP NEURAL NETWORKS

Project involved encoding images using a pre-trained convolutional neural network and used to train a recurrent neural network (Long short-term memory). The resulting model is able to generate string captions for any image in text dataset.

EXPLORATION OF CATIONS FOR VBH MODEL SYSTEM USING MACHINE LEARNING

Project involved training of various machine learning models (especially boosting algorithms) using data from quantum mechanical properties of various molecules. Trained models were used predict the solubility of 500 new molecules for optimization purposes.

SKILLS

- Python, Java, HTML, CSS, JavaScript.
- Machine learning implementation (scikit-learn, tensor flow, keras)
- Data visualization with excel, JMP, matplotlib, and Seaborn
- Research oriented communication.