Nareg Megan

(608) 843-7045   nmegan@berkeley.edu   NaregAmirianMegan.github.io   (GitHub, LinkedIn, Projects)

Education

UNIVERSITY OF CALIFORNIA, BERKELEY | COMPUTER SCIENCE AND APPLIED MATH | AUGUST 2018 - MAY 2022

Relevant courses: Structure/Interpretation of Computer Programs, Data Structures, Discrete Math and Probability, Integrative Biology, Multivariable Calculus, Chemistry. (GPA: 3.4 / 4.00)

MIDDLETON HIGH SCHOOL | HIGH SCHOOL DEGREE | SEPTEMBER 2014 - MAY 2018

Relevant courses: AP: Computer Science, Calc AB/BC, Chemistry, Physics (**UW-Madison Dual-Enrollment:** Linear Algebra and Differential Eq., CS 300, CS 400; Java, algorithms, data structures). (GPA: 3.92 / 4.00)

Experience

SOFTWARE ENGINEERING INTERN AT DIRECT | MADISON, WI | MAY 2019 - PRESENT
Direct, commercial real estate broker platform

- Built data intake pipeline using image and text processing (OpenCV, regex, etc..) and optical character recognition
- Utilized Google Cloud APIs such as Google Vision and Gmail.

ACADEMIC INTERN UC BERKELEY EECS | BERKELEY, CA | FEBRUARY 2019 - MAY 2019
UC Berkeley EECS (Electrical Engineering and Computer Science) Computer Science 61A.

- Answer questions during lab and office hours pertaining to Python, Scheme, SQL, or any other course topics
- Resolve technical issues with both the students and the course including homework and project submission errors
- Conduct comprehension checks with students to verify their understanding of OOP, functional programming, etc…

WIPAC DATA ANALYST | MADISON, WI | JUNE 2017 - AUGUST 2017
The Wisconsin IceCube Particle Astrophysics Center (WIPAC) collects and analyzes neutrino data from the IceCube detector in the South Pole.

- Used Python and SQL to analyze neutrino data and develop datasets of commonly misclassified neutrino events
- Leveraged a platform called Zooniverse for human analysis of data which improved the quality of the training data
- Improved automated classification algorithms of neutrinos entering the detector using improved data

Skills

Programming Languages: Python, Java, JavaScript, HTML, CSS, SQL, Scheme (Lisp), Swift

Libraries/Tools: Git, TensorFlow, Keras, NumPy, ReactJS, Processing, Pandas, BeautifulSoup4, requests, and others

Concepts/Algorithms: Fundamental algorithms (graphs, trees, hashing, etc), deep learning, RL, HMMs, SVMs, NLP

Leadership / Organizations

CAL LAUNCHPAD | BERKELEY, CA | FEBRUARY 2019 - PRESENT
Developer on Moorjani Lab Project

- We are working with Moorjani Lab to enhance ancestral genetics tracing with cutting edge machine learning algorithms.
- These algorithms could eventually allow us to more accurately trace diseases and understand adaptation.

OPEN SOURCE AT BERKELEY | BERKELEY, CA | FEBRUARY 2019 - PRESENT
Developer

- We work on brainstorming and developing open source libraries for UC Berkeley and the broader software community.

INVESTMENT CLUB | MADISON, WI | DECEMBER 2015 - MAY 2018
Co-Founder/Co-President

- Gathered initial members, entered club into competitions, contacted and talked to potential guest speakers from financial firms in the area.
- Gave presentations on topics from options trading to cryptocurrency.

Projects

ARTIFICIAL NEURAL NETWORK LIBRARY IN JAVA | REDDIT BASED CHATBOT | ATARI BREAKOUT RL BOT | STAR-DEFENSE IOS SPACE INVADERS VARIATION | DATA COLLECTOR (WEB SCRAPER FOR ML DATA) | RL TRADING BOT