Ivan Sepulveda

San Francisco, CA | (832) 696-8074 | iesepulveda@dons.usfca.edu

Linkedin.com/in/ivansepulveda/ | github.com/ivan-sepulveda/ | iesepulveda.com

EDUCATION

University of San Francisco (USF), San Francisco, CA

B.S. in Physics, Minors: Computer Science & Engineering-Physics   Expected August 2019

RELEVANT EXPERIENCE

Rideshare Modeling: Research Assistant – USF School of Management, San Francisco, CA

Professors Shivani Shukla & William Riggs   April 2019 – Present

- Building a dynamic model of rideshare prices by day of the week based on Uber data
- Integrating real public transit data into model as a consumer option
- Co-authoring an academic paper that will draw on this model in order make recommendations as to how metropolitan areas can decrease traffic congestion while maintaining consumer-driver economic equilibrium

Computational Physics: Research Assistant – USF Physics Department, San Francisco, CA

Professor Milka Nikolic   May 2017 – Present

- Wrote simulation of electrons propagating through Argon plasma in various conditions.
- Utilized results to obtain ideal plasma etching parameters.

Professor Seth Foreman   May 2016 – December 2016

- Wrote simulation of a femtosecond laser releasing photon pulses towards sharp metal alloy tip, altering parameters such as temperature, alloy composition and pulse length.

ACADEMIC & PERSONAL PROJECTS

Multithreaded Search Engine   January 2019 – May 2019

- Wrote a Java program that cleans and parses the text from files and websites into an inverted index of word stems and their locations within the corresponding document
- Added support for exact search and partial searching

When do stocks beat the S&P?   April 2019

- Using various classification methods, I determined essential stock performance metrics
- Evaluated securities in a binary manner to reflect if they had surpassed the S&P 500's performance for the equivalent time period

German Credit Risk Model   Fall 2016

- Built a credit risk scorecard (set of probability values) based on the sample data provided

Retail-Fashion Stock Correlation Script   September 2018

- Developed a methodology to compare percent changes in social media presence with percent changes in the corresponding retailer's stock price.
- Employed efficient use of Python API's and libraries to obtain social media and stock price figures dating as far back as necessary.

Facial Recognition Algorithm   Fall 2016

- Wrote and trained a facial recognition model with 70% accuracy using PCA and CV

SKILLS

- Python, Java, HTML, CSS, & NLP
- Fluent in Spanish. Elementary Proficiency in French.