



NICHOLAS GUERRERO

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Summary:

Computer Science Masters graduate with a passion for Full Stack Software Engineering, Machine Learning, and Cryptography. Solid foundation in machine learning, algorithms, web technologies, computer networking, operating systems, database systems, applied cryptography, and information retrieval.

EXPERIENCE

City National Bank – Data Management Officer

November 2017-January 2020

- Support and drove implementation, controls, and requirements for SQL table schemas for an enterprise relational database. Data organization led to 30% increase in compliance rates
- Enabled root cause analysis of erroneous data errors propagating throughout enterprise data warehouse. Created remediation plans in response
- Developed and validated documentation for processes and procedures concerning daily model risk evaluation reports to team leads using Python and SQL queries
- Performed in a cross-functional team acting as a liaison between the Software Engineering department and client facing Business Units
- Built full-stack Python Flask-App utilized to run data validation tests on incoming monthly data that fed into machine learning regression portfolio risk evaluation models

NASA, Jet Propulsion Laboratory – Jr. Data Scientist

March 2017-November 2017

- Trained a machine learning recommendation engine using Scikit-Learn, Gensim, and Tensorflow Python libraries. Machine learning model recommend different IT products to JPL staff
- Managed the Mongo No-SQL databases of the team's enterprise IT platform; improved data quality by 50%
- Collaborated with team's web developer to prototype & integrate machine learning models into platform backend using React.
- Designed and helped implement a new ticketing and response system, increasing IT team ticket resolution rate by 15%
- Built out CI/CD pipelines and automated testing script RESTful APIs in Python software language.
- Ran, monitored, and alerted management to chronic IT issues plaguing different research departments

City National Bank – CCAR Data Analyst Intern

September 2016-March 2017

- Reported on incoming edit check feedback from Comprehensive Capital Analysis and Review (CCAR) testing team

EDUCATION

University of Southern California

Los Angeles, CA

Master of Science, Computer Science

August 2021-May 2023

Relevant Coursework: Machine Learning, Analysis of Algorithms, Web Technologies, Computer Networking, GPA 3.8
Programming System Design, Operating Systems, Database Systems, Applied Cryptography, Information Retrieval

Whittier College

Whittier, CA

Bachelor of Arts, Economics, emphasis in Math/Business

September 2012-June 2016

Relevant Coursework: Econometrics & Statistical Models, Financial Derivatives, Accounting, Game Theory GPA 3.5

PROJECTS

Weenix Operating System

September 2022-December 2022

Coded Process Management, Memory Management, File System, Device Drivers, and Network Stack from scratch in C programming language

RSA/AES Cryptosystem

January 2022-March 2022

Implemented a cybersecurity cryptosystem using AES-128 to encrypt data and RSA (OAEP) to protect AES keys in Python. RSA is foundational to most modern cybersecurity systems.

TCP/UDP Socket Programming

September 2021- December 2021

Developed in C++ a UNIX socket programming network model of a social matching service where two clients issue a request for finding a compatibility score. Requests are sent to a Central Server using the TCP/UDP protocols to interact with three other backend servers for pulling information and data processing

SKILLS

Programming Languages and Software Tools: Ethereum Smart Contracts, TensorFlow, Git, React.js, Docker, AWS, Kubernetes, Golang, Python, C++, Solidity, JavaScript, SQL Server, NoSQL Databases, Linux, HTML, CSS, Material UI, Node.js, .NET, C#