

NICHOLAS GUERRERO

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Summary:

Computer Science Masters graduate with a passion for Full Stack Software Engineering, Machine Learning, and Cryptography. Seeking full-time roles to apply my skills and knowledge to real-world challenges. 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

- Designed SQL table schemas for an enterprise relational database. Data organization led to 30% increase in compliance rates
- Visualized results of Federal Model Edit Check Reports using Python for computation and different visualization tools
- Developed an automated system to provide daily model risk evaluation reports to team leads using Python and SQL queries
- Performed in a cross-functional team acting as a liaison between Software Engineering department and the Business Units
- Built full-stack Python Flask-App utilized to run data validation tests on incoming monthly data feeding into enterprise database

NASA, Jet Propulsion Laboratory – Jr. Data Scientist

March 2017-November 2017

- Trained a recommendation engine using Scikit-Learn and Gensim to 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
- Designed & helped implement a new ticketing/response system increasing IT team ticket resolution rate by 15%
- Created a reporting structure to identify what departments were having chronic IT issues

City National Bank – Intern CCAR Data Analyst

September 2016-March 2017

- Reported on incoming edit check feedback from United States Federal Reserve 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 Derivates & Accounting, GPA 3.5
Game Theory

PROJECTS

Chess Analysis ChatGPT React App

September 2016-March 2017

Chess analysis app written with MERN stack and chatGPT Api JavaScript library to analyze chess moves. React Front End, Node.js backend connected to a Mongo No-SQL database and Express.js for middleware, routing, and HTTP functionality

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 cryptosystem using AES-128 to encrypt data and RSA (OAEP) to protect AES keys in Python with Pycryptodome

TCP/UDP Socket Programming

September 2021- December 2021

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

SKILLS

Programming Languages and Software Tools: Python, C++, Java, JavaScript, SQL Server & NoSQL Databases, Linux, OSx, Windows, Git, Jira, Operating Systems, React, Typescript, Node.js, HTML, CSS, Material UI, Next.js, AWS, Pytorch, Tensorflow