



# NICHOLAS GUERRERO

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## Summary:

Computer Science Masters graduate and software engineering professional with a passion for Full Stack Software Engineering, Artificial Intelligence (AI)/Machine Learning (ML), and Cybersecurity. Studying to get the AWS Cloud and Security+(Plus) Certification.

## EXPERIENCE

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### ComplyAI – Full Stack Software Engineer, AI/ML Intern

September 2023-Present

- Deployed to production 90%+ accuracy LLM BERT Text & VIT Image Transformer AI models written in Python and containerized in Docker, leveraging AWS cloud services. The models are used as integral pieces of the core business product
- Owned and greatly expanded upon a piece of the ComplyAI codebase that had to do with loading different AI/ML models on AWS EC2 production instances and exposing endpoints for model access
- Wrote a testing suite for AI/ML model output endpoints using Pytests that is integrated into a CI/CD pipeline before a pull request is moved into staging-area of an AWS ECS instance
- Reduced the AI/ML model endpoint computation time from 15 seconds to 200-300 milliseconds by refactoring the design pattern of certain areas of the codebase

### 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
- Performed in a cross-functional team acting as a liaison between the Software Engineering department and client facing Business Units
- Built Python Flask-App utilized to run data validation tests on incoming monthly data that fed into regression portfolio risk evaluation statistical models

### NASA, Jet Propulsion Laboratory – Jr. Data Scientist

March 2017-November 2017

- Trained a ML collaborative filtering recommendation model using Scikit-Learn, Gensim, and Tensorflow Python libraries. ML model recommends IT products to JPL staff as part of a core feature.
- Collaborated with team’s web developer to prototype & integrate ML model into platform backend using React, Python, AWS EC2/S3

### 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

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### 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

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### 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

### TCP/UDP Socket Programming

September 2021- December 2021

Developed in C++ a UNIX socket programming network model. Requests are sent to a Central Server using the TCP/UDP protocols to interact with three other backend servers for data processing

## SKILLS

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**Top Programming Languages and Software Tools by Years of Experience:** Linux , Python, Pytorch, TensorFlow, Pandas, Numpy, C++, JavaScript, React.js, Node.js, Docker, AWS Botto-EC2/S3/SQS, Git, SQL, NoSQL, , HTML, CSS, Typescript, Java,