

EMANUEL BARRERA ESTRELLA

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🎓 EDUCATION

Computer Systems Engineering, B.S. | Instituto Politécnico Nacional (ESCOM)

JAN 2017 - JAN 2022

Full Stack Development as Major, Web Development and Mobile Development, Electronics, Data Mining, Algorithms and Data Structures

📁 WORK EXPERIENCE

Data Engineer @ T7 International Group ® (Partnered with AT&T)

VIEMY - LLM Development for AI ChatBot

March 2024 - Present

Developed VIEMY, an advanced chatbot leveraging the OLLama framework for NLP to enhance user interaction and automate customer service. Integrated NLP models to analyze and understand user inquiries, ensuring accurate responses.

Developed a Dataset via ETL Processes Extracted data from metric registry logs to create datasets. Implemented transformations and loaded the data for analysis, enabling future anomaly predictions.

Optimized the Database for AT&T's Telecommunications Infrastructure CRM MySQL data lake using an SNMP Monitor and UI for configuration on Network Elements e.g. Switches, Routers, Access Points & IoT Sensors.

Python, OLLama, LangChain, Pandas, ML NLP, Docker, SNMP, Cisco, Azure DevOps, Flask API

Software Engineer II @ HCLTech ClearCase and VersionVault Express ®

ClearCase ® Support Development

March 2022 - September 2023

Provided support for C and C++ development on Windows, Linux, and AIX. Worked on the connectors layer of the IBM z OS ® mainframe, converted compiled output binary objects for 64-bit architecture, and tested performance in Linux environments.

C, C++, Xmakefile, GDB, TCP sockets, distributed systems, IBM z OS connectors, RCC

HCL VersionVault Express ® Web Application

Developed and tested the API for migrating the ClearCase ® Bash Client to a new web application. Implemented unit testing for API endpoints and used Jenkins Pipeline for integration tests, enhancing team coordination.

Java 8, Spring Boot, Maven, Python 3, Django, Eclipse, Swagger, Jenkins, Vagrant, Microsoft Azure, Apache Tomcat Server

Back-End Developer @ Segurify

March 2021 - February 2022

- Developed and migrated a CRM project to a web app for the insurance industry, managing B2C processes from ticket requests to generating insurance policies (AIG, Qualitas, GNP, HDI).
- Developed a Gmail Bot utilizing OAuth for Gmail Account Management, enabling the handling of over 999 tickets per day for the customer management process and automating the issuance of policies.

Java 8, Spring Boot, Maven, IntelliJ, Git, BitBucket, Jira, Postman, Vue.js, JavaScript, XML, RegEx, Google Cloud Console

★ SKILLS

🔗 PROGRAMMING LANGUAGES EXPERTISE

4 YEARS: Java | *mostly for Back-End & SpringBoot framework*

3 YEARS: JavaScript | *worked React and Node development*

2 YEARS: C/C++ | *developed Rational ClearCase ®*

2 YEARS: Python | *worked, using Django, in ReviewBoard*

1 YEAR: PHP | *developed on Laravel framework*

6 MONTHS: Rust | *mostly for competitive programming*

6 MONTHS: Kotlin | *Android development & SpringBoot*

🌐 ONLINE COURSES

◇ AWS Certified Cloud Practitioner (2024) - **Score 571**

◇ Data Mining with Weka : Online Course by The University of Waikato to introduce Machine Learning (2020)

◇ TOEFL ITP Certification (2021) - **Score 500 (CEFR B1 Lv)**

◇ O'Reilly Online Training - Introduction to Containers: Docker (2023)

🔧 TECHNOLOGIES OF EXPERTISE

Android SDK, Android Studio, Ant, AWS, Azure Console CLI, Bootstrap, CSS, Docker, Eclipse, Flask, EC2, Firebase ML Vision Analytics, Git, Google API Console, HTML, IntelliJ, Jenkins, jQuery, Makefile, Material Design, MongoDB, Netbeans, Nginx, Node, Oracle Cloud, Postman, PostgreSQL, React, RegEx, SNMP, Spring Boot, SSH, Swagger, Vue.js, VS Code, Vagrant, Vim, VirtualBox. Arduino, Windows Batch, Linux.

🏆 LEADERSHIP AND AWARDS

✓ Participation at the Microsoft Chatbot Hackathon

✓ Student of Academic Excellence at the Superior School of Computer Sciences (2017 - 2021)

✓ International Academic Exchange Program at Technical University of Madrid, Spain (2020)