JOSE GARCIA

202-361-8059 | garciaguerra.jl@gmail.com | LinkedIn | Github | Portfolio

SKILLS

- **Programming Languages:** Python
- **MLOps:** CI/CD, IaC (Terraform), Automated Testing (PyTest), Monitoring
- **Software Development:** Microservices, RESTful APIs (FastAPI), Agile Development
- **AI & ML:** Generative AI, NLP (spaCy), Prompt Engineering, NER, Model Training & Deployment
- **Tools & Platforms:** Semantic Kernel, Docker, GitHub, Dataiku, Sckit-Learn, PyTorch, NumPy, Pandas
- **Cloud:** AWS (ECS, SageMaker, Lambda, EC2, DynamoDB, S3, EventBridge, Textract), Azure (AI Document Intelligence)

EXPERIENCE

MERCK, Software Engineer **New Jersey, August 2022 – Present**

- Develop and maintain a multi-agent orchestration platform leveraging Semantic Kernel framework, enabling the integration of agents that automate information retrieval, augment conversational applications, and optimize business processes.
- Architect and deploy a Name Entity Recognition (NER) system capable of processing 1,000 daily image and scanned PDF files using Azure AI Document Intelligence, Generative AI, and NLP.
- Deploy a serverless AI summarization system using AWS Lambda, SageMaker and Docker, supporting on-demand content extraction, processing and summarization services.
- Design and build RESTful APIs with FastAPI, facilitating the deployment of machine learning models as web services.
- Leverage LLMs to build a multilingual content summarization system, automating content standardization across 200,000 courses on an enterprise training platform.
- Streamline data processing for 1,200+ monthly shipping forms using AWS Textract and Lambda, eliminating manual intervention and enhancing operational efficiency across manufacturing divisions.
- Lead the development and integration of automated testing frameworks into CI/CD pipelines using PyTest, ensuring high quality code for an enterprise chatbot application.
- Establish continuous deployment (CD) pipelines in GitHub Actions and implemented Infrastructure as Code (IaC) with Terraform, streamlining infrastructure provisioning and cutting deployment time by 50%.
- Architect and deploy microservices on AWS ECS, enabling seamless scaling for AI applications and optimizing cloud resource utilization.
- Build monitoring and alerting systems using AWS EventBridge and Lambda, enhancing operational reliability and providing insights into application performance.
- Implement clustering algorithms with Scikit-Learn, enabling product analytics teams to extract insights from 60,000 customer inquiries related to clinical products and treatments.
- Train machine learning models with Scikit-Learn and Dataiku, achieving 80% accuracy in categorizing customer inquiries.

GEORGE WASHINGTON UNIVERSITY, Data Analyst **Washington DC, September 2021 – May 2022**

- Created comprehensive reports and data visualizations using MS Excel, enabling the Energy Engineering division to effectively monitor and optimize the performance of GW's Cogeneration Utility Plant.
- Automated data processing workflows with Python, resulting in a 40% reduction in invoice and utility meter processing time.

AI FOR GOOD, AI Research Intern **Washington DC, June 2021 – August 2021**

- Developed data scraping, processing and NLP pipelines, improving data retrieval and analysis across 5,000+ academic works.
- Fine-tuned spaCy Named Entity Recognition models with Prodigy, achieving 75% accuracy in identifying dataset mentions and metadata from academic papers.

EP PETROECUADOR, Reservoir & Production Engineer **Quito-Ecuador, August 2017 – June 2019**

- Built forecasting models using historical data, supporting resource allocation decisions and optimizing operational planning.
- Developed reservoir and production performance reports, providing technical insights to support reserve and production management decisions across five oil fields.
- Conducted site inspections and data collection, ensuring operational efficiency in facilities producing 50,000 barrels per day.

EDUCATION

George Washington University, Master of Science in Data Analytics **September 2020 – May 2022**

Escuela Politécnica Nacional Ecuador, Bachelor of Science in Petroleum Engineering **January 2011 – May 2017**