# Valeria Vera

•Hidalgo, Mexico •771-38-200-21 •valveralagos@gmail.com •linkedin.com/in/valeriavla •github.com/valeriavla

### **EDUCATION**

# Master of Science in Data Science and Analytics

08/2022 - 05/2024

Georgetown University

USA

• Award: Fulbright grant to pursue a graduate degree

#### **Bachelor of Engineering in Information Technology - Cum Laude**

08/2015 - 11/2020

Benemerita Universidad Autonoma de Puebla (BUAP) - Computer Science department

Mexico

- Award: Exceptional career development by *ANIEI*
- Thesis: Misogyny detection using supervised classifiers, results presented at GCURS Symposium at *Rice University*
- Research visit: Natural Language Processing with Java at the *University of Texas*

### **SKILLS**

Computer Science: Object-Oriented Programming, Design Patterns

Data Science: Natural Language Processing, Large Language Models, Reinforcement Learning

Prog. Languages: Python, Unix shell language, R, Java, C++, C, SQL

Packages: Sklearn, Plotly, TensorFlow, Pytorch, Huggingface, Apache Spark, Hadoop (Azure, AWS)

Data Analytics: Tableau, Excel, Power BI

Languages: English, Spanish

# **WORK EXPERIENCE**

# **Graduate Technical Intern – Machine Learning**

05/2023 - 08/2023

Intel Corporation

- Performed data reduction, modeling, and correlation analysis for a 400,000 rows by 50,000 columns dataset
- Automated data extraction from an SQL database, reducing extraction time by 80%
- Implemented unsupervised clustering techniques and reduced duplicated data by 60%
- Automated clustering analysis through a UI decreasing clients engineering time by 90%

**Research Assistant** 01/2023 - 05/2023

Center for Security and Emerging Technology

- Conducted an in-depth review of 100 AI papers on "explainability"
- Documented the evaluation methodologies, benchmarks, and models adopted in the papers

# **Software Development Engineer**

01/2021 - 08/2022

Intel Corporation

- Led 30 people from cross-functional teams to collaborate in a Reinforcement Learning framework
- Debugged software and hardware memory issues in Linux systems in over 20 Intel products
- Communicated over 30 Unix distributed systems to collect hardware signals
- Managed 5 people to implement a Machine Learning solution, saving over 90% of analysis time
- Presented results at an international conference with a 10-20% acceptance rate in 2021 and 2022

#### **Software Validation Engineer Intern**

12/2019-11/2020

Intel Corporation

- Improved test content creation using NLP, cutting development time by 85%
- Developed a Client-Server communication model on Python that reduced hardware expenses by 80%

### **PROJECTS**

# **Analyzing Political Charisma with LLMs**

05/2024

Implemented RAG to develop a chatbot for analyzing charisma in politics

# **Fine-tuning LLMs to Reduce Toxic Outputs**

01/2024

Fine-tuned LLMs (Mistral 7B, Llama 3 8B) using curated datasets to reduce toxicity

## TPU performance prediction using Graph Neural Networks

08/2023

Optimized performance of Graph Neural Networks for TPU runtime prediction with Keras

### Walkability impact in D.C.

01/2023

Collected data with APIs, classified sentiment using LLMs, created visualizations using Plotly and Javascript

#### Revictimization: a misogyny detection problem

08/2022

Web scrapped data to fine-tune 3 LLMs and detect revictimization, results presented at *WiDs-Stanford University*