# Valeria Vera

• Washington, D.C. • 202-718-1340 • 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 using Java at the University of Texas

## **SKILLS**

Computer Science skills: Object-Oriented Programming, Design Patterns, Algorithms design

Data Science skills: Natural Language Processing, Large Language Models, Optimization, Deep Learning

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

Data packages: Sklearn, NumPy, Pandas, Plotly, Keras, Pytorch, Huggingface, Apache Spark, Hadoop

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 engineering time by 90%

**Research Assistant** 01/2023 – 05/2023

Center for Security and Emerging Technology

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

#### **Software Development Engineer**

01/2021 - 08/2022

Intel Corporation

- Debugged software and hardware memory issues in Linux systems in over 20 Intel products
- Communicated over 30 Unix distributed systems to collect hardware signals
- Refactored a Python project legacy code reducing new costumer tools integration time by 60%
- Applied ML and RL to predict electrical conditions and automate test generation, 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**

#### Toxicity analysis in large corpora

01/2024

Analyzed the impact of toxicity in fine-tuned LLMs using the <u>HELM framework</u> with Pytorch

# 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

### Math learning support system for kids with ADHD

11/2019

Developed a WebApp using Unity based on serious games research. Presented at Congress of education CONTE