

Salvador Robles

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Education

The University of Texas at Austin Master of Science in Computer Science (GPA: 3.81 / 4.0)	Expected: May 2026 Austin, Texas
The University of Texas at El Paso Bachelor of Science in Computer Science and Mathematics (GPA: 3.94 / 4.0)	Graduated: May 2024 El Paso, Texas

• Courses: NLP, Visual Recognition, Generative Models, Distributed Systems, Parallel Algorithms, Convex Optimization

• Awards: Department Rank 1 (Mathematics) Academic Award Scholarship (top 0.1%)

• Courses: Machine Learning, Deep Learningsg, Computer Vision, Linear & Abstract Algebra, Statistical Inference

Experience

The University of Texas at Austin Python, PyTorch, NumPy, Pandas, Multi-Agent systems	Austin, Texas
Teaching Assistant (Courses: AI Agents, NLP, and Data Analytics)	Aug 2024 - Present
• Designed and graded 30+ Python assignments for 60+ students, covering ML, transformers, LLMs, and agents.	
• Tutored a total of 100+ students in bi-weekly office hours, earning 100% positive feedback for ML concept clarity.	
Uber Python, Apache Spark, Scala, Pandas, Data Security	Seattle, Washington
Software Engineering Intern	May 2022 - Aug 2022
• Integrated ML models to classify and flag sensitive user data (e.g., identity + location) in Uber's DataK9 platform.	
• Boosted accuracy from 87% to 93% on exabyte-scale data, enabling categorization of over 400k+ datasets at Uber.	
• Reduced latency by 12% by developing a Scala-based Apache Spark pipeline to collect training data for inference.	
• Designed and evaluated 10+ feature engineering approaches, identifying key predictors for 6% accuracy gain.	
Google C++, Python, Vertex AI, Recommendation Systems	Waterloo, Canada (Remote)
Software Engineering Intern	May 2021 - Aug 2021
• Contributed to Cloud AI's large-scale ML workload migration from Borg to Vertex AI, supporting 1k+ pipelines.	
• Engineered a multi-threaded C++ handler, tuning concurrency across 5-30 threads and improving throughput by 12%.	
• Developed and tested support for scalable vector matching relying on a container's local volume in Python.	
Google JavaScript, Java, Google Maps API, HTML/CSS, UI/UX, REST APIs	Mountain View, CA (Remote)
Student Training in Engineering Program Intern (STEP Intern)	May 2020 - Aug 2020
• Built a full-stack route planner using Google Directions API and a grid-based datastore modeling 500 crime zones.	
• Built a JavaScript obstacle-avoidance algorithm that evaluated 20+ routes and returned the top 3 safest routes.	
• Tested and validated the system across 50+ simulated trips, and filtering high-risk segments in 90% of cases.	

Projects

Disaster Response Message Classification  Fine-Tuning BERT, RAG, FastAPI	Dec 2025
• Deployed a FastAPI web application for multi-label disaster message classification using a fine-tuned BERT model.	
• Integrated a FAISS-based RAG pipeline, indexing 26k+ messages and achieving Recall@5 = 0.85 for semantic retrieval.	
Multimodal Expert Sports Coaching System  Vision-Language Models, PyTorch, Transformers	Dec 2025
• Developing an AI Sports Coach to give coach-like feedback from video clips by learning from 1M+ YouTube videos.	
• Tested 5+ evaluation systems that would align with human values by collecting 30k+ coach-data from Ego-Exo4D.	
Benchmarking Spatial Reasoning in Vision-Language Models  PyTorch, Transformers, OpenCV	May 2025
• Benchmarked spatial reasoning in Vision-Language Models, focusing on left-right consistency, and size perception.	
• Evaluated SOTA models (LLaVA-7B/13B, GPT-4o, Claude-3.5) on 5k+ COCO images and 720 synthetic scenes.	

Publications and Activities

• Predicting Fairness of ML Software Configurations	 PROMISE'24 (Presented in Top Conference)
• When is Deep Learning Better and When is Shallow Learning Better	 IJPEDS'22 (Best Student Paper)
• Officer, The Coding Interview Club: Coached 50+ students to land internships via mock interviews and weekly sessions.	
• Clubs: UT Competitive Programming, Hispanics in Computer Science (HACS), Texas ACM, ML and Data Science Club.	
• 5-time National Medalist (Silver/Bronze, Top 3, 0.001%) in the Mexican Mathematics Olympiad.	

Languages and Technologies

Languages: Python, C/C++, Java, Scala, JavaScript, R, HTML/CSS, Haskell

Systems & Backend: AWS, GCP, Docker, Kubernetes, Linux, Git, Bash, CI/CD, Flask, FastAPI, Node.js

Data & ML/AI: SQL, Apache Spark, MongoDB, PyTorch, Pandas, NumPy, Fine-Tuning LLMs, LLM Agents