Marianella Salinas

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Education

Cornell University, New York, NY *Expected May 2025*
Master of Engineering in Computer Science (Merit Scholar)

Relevant Coursework: Machine Learning Engineering, Natural Language Processing, Designing Data Products

University of Connecticut, Storrs, CT *May 2024*
Bachelor of Science in Computer Science (Honors Scholar), Minors in Math and Entrepreneurship | GPA 3.6

Technical Skills

Python (SciKit-Learn, Pytorch), SQL, CI/CD, AWS Cloud, Docker, PowerBI, Excel, Unity, C#, C, React.JS, SDLC, Figma

Work Experience

Connecticut Innovations (CI), New Haven, CT *June 2024 - August 2024*
Venture Capital Summer AI Associate, Technology Fund

- Engaged with 120+ startup CEOs and CTOs in investor meetings across FinTech, ClimateTech, and Bioscience, and presented 5 investment memos for approval to senior leadership aligned with CI's long-term strategic goals.
- Evaluated AI-driven solutions in consumer-facing products, B2B Enterprise AI, and Data Management by assessing product roadmaps, evaluating market segments, modeling valuation in company financials, and drafting term sheets.
- Led due diligence for a $500k investment in Sigma360, an AI-driven AML and KYC compliance platform for financial institutions, by engaging with customers and investors and conducting technical diligence on the platform's data infrastructure and Generative AI product.

Royal Bank of Canada Capital Markets, New York, NY, 2-Year Leadership Program
Quantitative Research and Development: Software Engineer Intern *June 2023 - August 2023*

- Led the development of an AI chatbot using Python, RASA, and Docker to address internal customer challenges within RBC's AI/ML data visualization tools for quantitative traders, providing on-site documentation and eliminating the need to switch between tools.
- Conducted 30+ user interviews to identify pain points in accessing visualization documentation, training the chatbot on frequently asked questions and user queries to improve user workflow and enhance operational efficiency.
- Designed an automated data hydration request system with REST API, React.JS, and GitHub tickets, enabling traders to access trading data more effectively, saving the DevOps team 15+ hours a week.

Quantitative Trading and Execution: Software Engineer Intern *June 2022 - August 2022*

- Pre-processed 50k daily trade executions using Python and SQL, generating weekly reports on municipal bond attributes and trends presented to underwriters and bankers for informed trading strategies.
- Built entity relationship models and PowerBI visuals from IPREO and Bloomberg databases, mapping relationships based on features like Credit Rating, Yield, and CUSIP. Presented these insights to higher-level management for a comprehensive view of RBC's US bond dynamics, to support decision-making on market positioning.

Leadership Experience

Hillside Ventures, University of Connecticut, Storrs, CT *August 2023 - May 2024*
Managing Director, Sustainability Fund

- Managed a $1M fund and led a team of 8 analysts through an iterative investment process, sourcing 150+ startups, defining investment criteria, and pitching business models and products for potential investments weekly.
- Led a $25k investment in AmpUp, an EV management SaaS platform, by analyzing IP strategy through a review of 15+ patents and conducting market research to evaluate the company's competitive advantage.

UConn Engineering: Investigating Factors Affecting First-Year Success for URM Students *November 2022 - May 2024*
Principal Investigator

- Conducted a mixed-methods, IRB-approved research study examining retention barriers in STEM courses through in-depth interviews and surveys with 40+ Black, Latinx, and Native American students in UConn's School of Engineering. Presented findings at academic conferences, highlighting course improvements that enhance equity and inclusion in engineering education.

Projects

Honors Thesis: Enhancing Stock Price Prediction Using AI/ML and Macroeconomic Indicators (Python) *April 2024*

- Developed machine learning models using Support Vector Regression (SVR) to predict stock prices by integrating GDP and CPI, achieving a 15% improvement in model performance for the consumer staples sector.

Engineering Capstone: Virtual Reality Training Simulation (Unity, C#, Oculus, Blender) *September 2023 - April 2024*

- Scrum Master for a team of 5 engineers to develop a zero-to-one gamified VR training platform for the TRUMPF TruLaser 2030 machine to simulate critical laser maintenance tasks; Completed pilots with 12 service engineers.