

Luis Victoria

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Work Experience

Production Engineer

Feb 2023 - Present

Bloomberg LP

- **Latency Optimization:** Maintained strict performance targets of $< 6\text{ms}$ median and < 250 max latencies for 99.99% of tick data, ensuring reliable operations across a system handling ~350 billion daily ticks.
- **Global On-call Lead:** Acted as the primary contact for the Ticker Plant system during 24/7 on-call rotations, leading remediation processes for critical incidents like exchange outages, hardware failures, and performing synchronization tasks to minimize client impact.
- **Capacity Planning:** Spearheaded evaluations for transitioning disaster recovery infrastructure from 36-core to 56-core machines, leading to projected savings of ~\$8 million USD while meeting compliance standards.
- **Latency Monitoring Enhancements:** Singlehandedly rewrote and designed a critical high performance per-tick instrumentation tool in C++, delivering real-time tick path latencies with minimal runtime overhead.
- **Software Rollout Stability:** Co-developed a product to identify and mitigate performance regressions from bad deployments by leveraging Bayesian Online Changepoint Detection, enhancing confidence in shipping and catching regressions in new tick-type rollouts.
- **Storage Prediction Tool:** Independently designed and implemented a Python tool to forecast machine storage use, deployed across 750 production machines to proactively set off alarms before reaching capacity limits.
- **Proactive Automation:** Automated various quality control procedures to verify machine synchronization for non-standardized production environments, reducing manual processes averaging 8 minutes down to a single click.

Quantitative Developer Intern

May 2019 - Aug 2019

Farrington Asset Management

- **Back-testing Enhancements:** Extended the firm's back-testing engine to include cryptocurrency asset analysis by integrating new data pipelines using CCTX and Binance, enabling quantitative evaluation of crypto markets.
- **Automation with Bloomberg API:** Reduced time to generate client portfolio analysis by 50% for the portfolio management team using information from PORT<GO>
- **Technical Research:** Leveraged Bollinger Bands and Stochastic Oscillators to support quantitative decision-making on biomedical pharmaceutical startups.

Education

Business and Computer Science

Sep 2018 - Dec 2022

University of British Columbia

- **Relevant Coursework:** Machine Learning & Data Mining, Advanced Algorithmic Design, Advanced Relational Databases, Theory of Computation, Advanced Software Construction, Functional & Logic Programming, Matrix Algebra, Empirical Economics, Calculus III, Information Systems Analysis & Design
- **Key Projects:** Automatic Function Composition (repo), Javascript Chess AI w/ Minimax (repo), Interactive Coding for Kids using NLP (repo), Prototype Bitcoin Payment Processor (repo)
- **Awards:** Blockathon 2019 Champion, Sauder Entrepreneurial Prediction Market 2022 Champion
- **Extracurricular Activities:** Ilios Investment Club - Head of Technology

Volunteer Work

- **Fundación ManoloNet:** Developed a Codecademy-like webpage via Django, teaching prospective blind teenagers Python.
- **Club de Niños y Niñas de México:** Implemented HTTPS using Let's Encrypt and prototyped a redesigned front page.

Skills

- **Fluent Languages:** English, Spanish
- **Personal Interests:** Football - Center Forward (Singapore Div 1 Champion, Vancouver Div 2 Champion), Basketball - Point Guard (Singapore U21 Club Champion), Golf (18 Handicap), Chess (2000 ELO on Lichess bullet)