Marcos Cardenas-Zelaya

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Work Experience

- **Crowdmark** — Toronto, ON
  Software Developer & Data Scientist — *October 2020 - Present*
  - Created an AI based plagiarism detection algorithm that ETLd unstructured JSON data, passed through the algorithm (Python) and displayed the results to the end user.
  - Created features (rotate pages, "undo" functionality in grading interface) following TDD.
  - Fixed bugs on both the front (Ember.js) and back (Ruby on Rails) end. Bug tracking on GitHub.
  - Presented new feature ideas, with written reports, to non-technical users on how they would add value.
  - Started the teams TikTok marketing campaign by creating content and convincing the marketing team to pivot to this platform.
  - Presented a novel sales strategy to the sales team that expanded Crowdmarks market reach to overlooked elementary schools in the US.

Skills

Languages & Frameworks R, Python, PostgreSQL, Ruby on Rails, Javascript (React & Ember), HTML, Docker, Kafka and learning AWS SageMaker.

Statistics: Regression Models, Time Series, Bayesian Methods, A/B testing, Data Mining, NLP, Machine Vision.

Coding: Algorithms & Data Structures, OOP, Database Design, Relationships & ORM, UNIX, Clean code principles, TDD, Debugging.

Communication: As a former McGill Debate Club member I am able to quickly and effectively communicate complex ideas.

Work Ethic: To create my FinSwap web-app I learned and implemented Graph Theory & Web Development in my spare time during my masters.

Collaboration: Always collaborating with colleagues in code reviews and pairing to fix bugs and flush out features.

Initiative & Problem Solving: Constantly suggesting new ideas for features and plans to improve our companies platform and revenue (Pivoting marketing to TikTok, Expanding our reach to untapped schools, creating a plagiarism detector to capitalize on the shift to online learning due to Covid-19).

Education

- **York University** — Toronto, ON
  Master's of Science in Statistics — *2019 - 2020*
- **McGill University** — Montreal, QC
  Bachelor of Arts in Mathematics and Economics, Minor in Finance — *2014 - 2019*
  - Senior Thesis: Effect of the minimum wage on US college enrolment rates using mixed models.

Personal Coding Projects

- **FinSwap**   Toronto, ON
  Full Stack Developer   *December 2019 - August 2020*
    - Created a web-app that leverages Graph Theory to match teaching assistants based on their preferences to swap exam/midterm invigilation duties.
    - Stack: React.js, Ruby on Rails, PostgreSQL. Matching algorithm written in Python.

Interests

Academic: Bayesian Statistics, Education economics, policy and tools.

Hobbies: Squash, cycling, bird watching and reading history.