UBC Science Co-op

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Michael DeMarco 3rd-year at UBC, currently at Samsung, 5-time TA

Education

University of British Columbia, B.Sc. Honours Computer Science (Co-op), minor in Data Science

Expected Grad: May 2023 GPA: 4.33 (94%) Coursework: Data Structures and Algorithms (96%), Statistical Inference (96%), Computer Systems (95%), Software Construction (95%)

Skills

Leadership, communication, accountability, tenacity

TypeScript, Python, R, Java, Node, React, Mongo, Bash, PostgreSQL, Docker, AWS, Azure, Git, Jira

Extracurriculars

The C.O.D.E. Initiative,

Research and Design Apr 2021 to present

Phi Gamma Delta,

Scholarship Chairman Jan 2020 to present

The Science Undergraduate Society,

Elections Administrator Apr 2020 to Apr 2021

Awards

Science Scholar/ Dean's Honour List May 2020, May 2021

J. Fred Muir Memorial Scholarship in Science Sep 2020

Djavad Mowafaghian Presidential Scholar Apr 2019

Work Experience

Software Engineer Intern (Product), Samsung Electronics Vancouver, British Columbia—Jan 2021 to present | <u>Site</u>

- Contributed extensively to full stack re-write of legacy Drupal monolith using **Node**, **React**, and modern service-oriented architecture.
- Refactored 15+ dashboards to use custom hooks and headless UI library.
- Spearheaded effort to create novel Node service to render data from both an ETL pipeline and a Kafka event stream efficiently.
- Eliminated critical anti-patterns in **Mongo** aggregation queries to drastically reduce endpoint response times by up to 50%.

Undergraduate Teaching Assistant, University of British Columbia Vancouver, British Columbia—Jan 2020 to present | <u>Site</u>

- Taught five unique courses to date using Racket, Python, R, and C.
- Received perfect evaluation scores from all 90+ students in most recent semester in categories including teaching ability and preparedness.
- Led labs, curated course readings, and relayed student needs to professor.

Software Engineer Intern (Product), Artesian Software Calgary, Alberta—May 2020 to Aug 2020 | Site

- Implemented **Node** services to process \$50,000+ in transactions via Stripe, manage survey data, and interface with **PostgreSQL**.
- Created, styled, and tested **React** components with **Sass** and **Jest**.
- Developed COVID-19 related app from scratch in 3 months which attracted early investment from Reno Chamber of Commerce, among others.

Technical Projects

Showrooms, show-off your desktop setup and make money from it Vancouver, British Columbia—Jan 2021 | $\underline{\text{Project}}$ | $\underline{\text{GitHub}}$

- Co-created web-app to allow users to take 3D photos of their desk setup and share online with Amazon-style affiliate links.
- Earned 3rd overall prize at BizHacks 2021 against 50+ teams.

Visual Studio Code Puzzles, simplify technical interview problem practice Edmonton, Alberta—June 2020 | Project | GitHub

- Built tool to bring interview "puzzles" into an IDE using TypeScript.
- Won Microsoft's "Best Use of External API" award and has 80+ users.

jCite, manage research papers and generate citations Vancouver, British Columbia—Apr 2020 | Project | GitHub

- Developed desktop application using Java to help scholars manage research.
- \bullet Achieved 100% code coverage in JUnit to prevent future regressions.

Interests

Backend development, data science, natural language processing, linguistics, economics, physics, reading, writing, podcasts, soccer, piano