

Sean D'Souza

SOFTWARE ENGINEER

☎ (+1) 613-864-6409 | ✉ sdsou037@uottawa.ca | 📷 seendsouza | 🌐 seendsouza

Education

University of Ottawa

BACHELOR OF APPLIED SCIENCE (BASC) IN SOFTWARE ENGINEERING

- *Relevant Coursework:* Computing, Software Engineering, Technical Report Writing, Calculus, Linear Algebra

Ottawa, Ontario

Sep. 2019 - Dec. 2023

Work Experience

EXHIBITION 001

FULL STACK DEVELOPER

- Architecting and implementing in-house shopping cart and inventory management with payment gateways
- Adapting client's design into user-centric UI
- Using Stripe, PayPal, ReactJS, Redux, NodeJS, MongoDB

Kingston, Ontario

Nov. 2019 - Present

CENX Inc.

JUNIOR SOFTWARE DEVELOPER

- Modified and extended a CLI program written in Python that summarizes gigabytes of FunkLoad test data from XML logs by improving runtime by 200% and is used by 1 engineer when attempting to identify bugs in the product when manually testing
- Created a graphing program in Python and AWK that visualizes daily system logs (SAR) using NumPy and Pandas used by 2 engineers when assessing performance metrics
- Refactored, fixed and restored an HTTP and WebSockets integration test to evaluate if any data was lost in between the client and the backend, which proved the existence of a bug in the product
- Containerized applications with Docker to enable running them in any environment

Ottawa, Ontario

Jul. 2018 - Aug. 2018

Additional Experience

vscout

TECH LEAD

- Designed and developed open source scouting software for VEX robotics written in Dart using Flutter and Sembast (NoSQL persistent store database)
- Designed to be serverless with P2P data transfer over a LAN for synchronization between individual databases on each client (mobile phone, tablet, or computer)
- Set up continuous integration (CI) to ensure high code quality for production
- Assigned stories to 2 developers, while verifying design and setting feature decisions with deadlines

Ottawa, Ontario

Jun. 2019 - Present

BoardTeX

FRONT END DEVELOPER

- Developed and designed the UI for an application in React JS with Redux and Material UI that uses the Google Vision and Mathpix API for optical character recognition (OCR) to convert images of math and computer science notes into LaTeX, a language for typesetting technical documents

Waterloo, Ontario (Hack the North)

Sep. 2019

Autosurance

BACK END DEVELOPER

- Created an application that speeds up the auto insurance claim process by identifying if a collision has occurred when given an image, and estimating the refund of a client based on their account details
- Used Python, Flask and AWS S3 Buckets with AWS Lambda to upload resized images to the cloud

Toronto, Ontario (Hack the 6ix)

Aug. 2019

VEX Robotics Team 2381C

SOFTWARE ENGINEER

- Used C++, Python and the PROS library to program motion profiling and other control algorithms to control our team's robot during competitions; we ended up attending the provincial championship

Ottawa, Ontario

Dec. 2018 - Apr. 2019

Additional Information

- Mentor and software advisor for high school VEX robotics organization consisting of 7 teams
- Lead Executive of Coding Club in high school
- Participant in 3 hackathons, which taught me **machine learning**, **React JS**, **Flask** and **AWS**
- acn-bot, patrickbot – Discord library in Python; Arch Linux
- Languages: **Python** (proficient), C++ (moderate), JS (moderate), Dart (basic), Haskell (basic)
- References are available upon request