# **Kassim Santone**

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#### **TECHNICAL SKILLS**

- Languages: C++, C, Python, Java, Scala, JavaScript, SQL, R
- Technologies: Ruby on Rails, Python Flask, GraphQL, Elasticsearch, AWS, Excel

#### WORK EXPERIENCE

## Lumentum - Ottawa, Ontario

Software Developer, May 2018 – August 2018

- Wrote alignment code for optical devices which allowed process engineers to receive information on optical devices in real-time and implemented synchronized motion for multiple axes.
- Implemented optimization algorithms (Bayesian optimization and bisection method) into existing optical device software to calibrate hardware to run more efficiently.
- Performed statistical analysis on optical device performance with Excel and SAS.

# University of Waterloo - Waterloo, Ontario

Research Assistant, September 2017 – December 2017

• Researched Operator Theory and worked towards simplifying (k, m)-transitivity.

#### NetSuite - Kitchener, Ontario

Software Engineer in Test, September 2016 – December 2016

- Wrote automation tests in Java to expose vulnerabilities in current codebase.
- Used SQL to data scrub customer issues and updated codebase to prevent issues from recurring.
- Performed manual tests to find issues in NetSuite dashboard; updated UI and backend to resolve issues.

## Silfab Solar – Mississauga, Ontario

Data System Administrator, January 2016 - April 2016

- Created overall equipment effectiveness (OEE) sheets with Excel and linked sheets to SQL database.
- Updated previous OEE models with VBA macros to increase ease of use for operators.
- Updated previous SQL database schema to account for changes in the company.

#### CIBC - Toronto, Ontario

Application Developer, May 2015 – August 2015

- Implemented authentication features (facial recognition and picture pattern) into Mobile Banking app on iOS and Android platforms.
- Worked with graphic designer on user interface and user experience for Family Banking app.

# **PROJECTS**

#### Toy Library - https://toylibrary.herokuapp.com/

- A Ruby on Rails project where users can post, search for and sign out up to 3 books using a Postgres full-text search, with the option for a variety of different filtering methods.
- Implemented user interface from scratch and a variety of sorting and filtering methods to help users find books appropriate for them.
- Implemented user authentication and mailer functionality and stored photos using AWS S3.

# Credit Card Fraud Detector - https://github.com/ksantone/CreditCardFraudDetector

- A Python project implementing machine learning algorithms (isolation forest and local outlier factor) to predict if a given credit card transaction is fraudulent.
- Created data visuals to demonstrate variables in credit cards that may influence likelihood of fraud, which were then used to determine which algorithms were appropriate to make predictions.

#### JournalShare - https://journalshare.herokuapp.com/

- A Python Flask project where users can post journal entries either as private or public.
- Privacy and pagination of posts implemented through Flask macros.
- Users and journal entries are all stored using SQLAlchemy object relational mapper.

#### **EDUCATION**

#### University of Waterloo, Waterloo ON

Bachelor of Mathematics in Computer Science and Pure Mathematics, September 2014 - Present

- Double Major in Computer Science and Pure Mathematics (Dean's Honour List for GPA over 87%).
- Scored top 400 in the world on the William Lowell Putnam Math Competition.