

# KEEGAN MCCALLUM | DATA ANALYST / WEB DEVELOPER

85 Queens Wharf Rd, Toronto, ON M5V 0J9 | (416) 799-4203  
keeganmccallum3@gmail.com | <http://github.com/keeganmccallum>

## PROFILE

- 3 years of financial industry experience focusing on data analytics, optimisation, and large-scale data processing.
- 3 years experience in software development, focusing mostly on full stack web development, mobile application development, and data science.
- designed, built and manged product development of multiple high impact, production-scale applications
- participated in the hiring/interview process, comfortable building and managing a team of software developers
- Bachelor's of Computing from Queens University

## SKILLS

- **Fullstack Web Development:** | React | Redux | D3 | Plotly | Matplotlib | HandsonGrid | JQuery | Dojo | ES2016 | AngularJS | NodeJS | Django | Flask | SailsJS | Socket.io | Deepstream.io | Pouch/CouchDB | Loopback | FeathersJS |
- **Mobile Development:** | Android(Java) | iOS(Objective-C) | React Native | Cordova | Realm.io | Parse |
- **Data Analytics:** | Pandas | Numpy | GLPK | Gurobi | Apach Spark | Hadoop | PostGreSQL | SQL Server | MariaDB | MongoDB | SQLite |
- **Machine Learning:** | Keras/Tensorflow | Magenta | LSTM | CNN | Spacy | NLTK |
- **Financial Management:** | Fixed Income Portfolio Management | Quantitative Finance | Linear Optimization | Statistics |

## WORK

### Portfolio Analytics Specialist | TD Asset Management (Jan. 2014 - Present)

- Trade Blotter:
  - Architected and Managed Start to Finish
  - Full-featured trade modelling platform
  - Multi-window, real-time updates
  - Built using modern web technologies (React, Redux, Deepstream.io, Django Rest Framework)
- Bond Portfolio Optimizer:

- Built and Architected Initial Production Release
- Flexible Graphical User Interface to Build Complex Constraints
- Multiple Objective Functions, Buy/Sell Lists
- Built With Modern Data Analytics Tooling (Numpy, Pandas, Gurobi)

## CTO | Personal Ventures (Sept. 2014 - June 2016)

- ReLease Rentals:
  - A mobile rental marketplace for the modern age with design cues taken from Uber and Tinder
  - Built with React Native, PostgreSQL and FeathersJS
- UFESS:
  - Aggregator for University Confessions facebook pages with 2,000 active users at peak
  - Supported anonymous posting directly through the application
  - Built with Ionic, Cordova, Strongloop Loopback

## Student | Queens University (Sept. 2014 - April 2016)

- Sign Language Tutor:
  - Created a tutor application which leveraged gesture-recognition technology to tech the user proper sign language
  - Created a classifier which recognized a number of signs and gave the user feedback in real-time
  - Built using the Myo Wristband, a custom-built Flexible Mobile phone prototype, and Cordova/Java
- Open World Queens University Video Game:
  - Scale, 3D model of Queens University Campus which the user can explore. 2 minigames triggered by entering certain areas
  - Built with Unreal Engine, C++

## Open Source

- sql4pandas
  - wrote a compiler for the SQLite language specification to allow running sql commands directly against pandas dataframes, written in pure python

## EDUCATION

- **Bachelors of Computing** | Queens University (Graduated April 2016)
- **Bachelors of Accounting and Financial Management** | University of Waterloo (left program after 3rd year)