Sheldon Benard

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Education

Bachelor of Science, Mathematics and Computer Science; Minor: Statistics **September 2014 – December 2018**

McGill University, Montreal, Canada

- GPA: 3.96 / 4.00
- J. W. McConnell Major Renewable Scholarship, for excellence in grades, community service, and school activities
- 2015 Dean's Honor List, for being in the top 10% of the faculty's class of students for the 2014/2015 school year
- 2016, 2018 Faculty of Science Scholarship, for academic excellence

Technical Skills

Programming Languages: Java, C, C#, Python, R, Bash, PowerShell, JavaScript, HTML, CSS, Solidity, SQL, MDX
Libraries, Frameworks: Django, Numpy, Scikit-Learn, Tensorflow, NLTK, .NET, Web3, Quorum, Vue, React, Node.js, Express.js, Redis
Operating Systems: Windows, MacOS, Linux Ubuntu
Publishing Software, Collaboration: MS Office Suite, Confluence, LaTex, Git, GitHub, Bitbucket, Agile Scrum, Rally
Current Coursework: Distributed Systems, Machine Learning, Time-Series Analysis

Internship Experience

Trading Products Quantitative Analyst **May 2018 – August 2018**

Bank of Montreal – Capital Markets, Toronto, Canada

- Leveraged the Quorum Blockchain platform, Solidity, Ethereum-Web3.js, and Express.js to deliver the first-ever Canadian dollar fixed-income issuance transaction on the Blockchain
- Utilized Machine Learning feature selection techniques (ex. LASSO) to ascertain the most relevant attributes in predicting the demand at bond auctions.
- Lead Developer for the first-phase of an encrypted year-end compensation web platform, which used SQL Server Always Encrypted to obscure sensitive data
- Full-stack development of an internal web platform, using Microsoft SQL Server, C#, and the .NET framework, and a client-facing external analytic website, built with Oracle Database, Node.js, Vue.js, and the Redis in-memory database

Software Developer Intern **January 2017 – August 2017**

General Electric Digital, Edmonton, Canada

- Developed E2E tests for the Enterprise Plant Insights product using Protractor and Cucumber, in JavaScript
- Built-up a LeanFT testing infrastructure, in C#, for the testing of the Production Management Software using a Page object model design pattern
- Explored Model-Based Testing, using GraphWalker, to automatically generate software tests and simulate various user behaviors
- Used PowerShell and Windows scheduling to conduct longevity tests on the Enterprise Plant Insight application

Programmer Intern **May 2016 – September 2016**

The Aquachronica Group, Edmonton, Canada

- Designed a stock analysis software, in Java and Python, that collected and maintained data for more than 7000 stocks and indices using yahooFinance API and Selenium Browser Automation Webdriver and IDE, on 2 servers that communicated over a network
- Implemented, in C#, a deep Artificial Neural Network (several thousand input nodes) for forecasting purposes
- Incorporated other API technologies (ex. World Bank API) to gather data on important global indicators for use in forecasting

Projects and Extracurricular Activities

BlockChainge **June 2018**

Angelhacks, Toronto, Canada

- Designed and implemented a Decentralized Application on the Ethereum Blockchain to undercut the fees of current crowdsourcing platforms and introduce transparency via a checkpoint system
- With Web3.js, jQuery, Truffle, Ganache, MetaMask, and Solidity, delivered the decentralized application in under 24 hours

IT Consultant and Automation of Country Assignments **January 2017 – December 2017**

Secondary Schools' United Nations Symposium (SSUNS), Montreal, Canada

- Developed a Country Assignment system that automated the assignment of hundreds of countries to delegates, reducing a 2-week manual procedure to an instantaneous process
- With SSUNS' Undersecretary-General Information and Technology, designed a new website front-end and integrated this front-end with the existing Django Framework back-end