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SKILLS

Languages:	Java, JavaScript, HTML5, Python, SQL, Bash, Pug/Jade, MATLAB, VBA
Frameworks/Libraries:	Spring, Node.js, React.js, Express.js, Puppeteer, Jest, Mocha.js, Chai.js
Tools:	Git, Docker, Gradle, NPM, Jenkins, Sonar, TeamCity, uDeploy, Excel

WORK EXPERIENCE

Paymentus | Application Engineer Toronto, Canada | November 2017 – Present

- Designed the first end-to-end (E2E) testing framework as a base for developing E2E tests throughout the application stack using Node.js while leveraging Puppeteer, Jest, Mocha and Chai
- Organized multiple workshops and presented the E2E testing framework to over 50 developers and QA engineers with post-workshop mentorships

Citi | Software Developer / Technology Analyst Toronto, Canada | June 2016 – November 2017

Portfolio Risk Management (PRISM) Application Team

- Redesigned and implemented a new service to run synchronization tasks in parallel to sync in-memory KDB tables with the archive DB on intraday equity data, reducing task runtime by 30%

Velocity Desktop Trading Application Team

- Implemented server-side search features for all Interest Rate Swaps (IRS), Bonds and internal financial products
- Investigated and implemented the cache architectural change from a peer-to-peer (P2P) model to an efficient Wide-Area-Network (WAN) model, reduced component startup-time and latency by 9X and mitigated deadlocks
- Implemented 200+ non-benchmark IRS on the order management component for Request for Quote (RFQ)
- Migrated a legacy data source for 300+ IRS products by redesigning field mappings and by implementing reference data enhancement actions to support consistent order flow for downstream components

Bell Canada | Business Intelligence Analyst Toronto, Canada | Summer 2015

- Reallocated technicians to different job types based on performance quartiles, which reduced monthly churn rate for the Internet and Home-phone channels by 29% and 17%, respectively
- Reduced external noise and statistical bias (multicollinearity) using regression and statistical adjustments to determine true drivers for field-related churn, ultimately used as reports for field managers
- Modelled workload distribution to determine the feasibility of “Same-day/Next-day” repair service offering and cutoff time, reducing miss-commitments by 54 tickets per day

Deloitte (Consulting Practice) | Business Technology Analyst Toronto, Canada | Summer 2014

- Implemented SAP system enhancements and developed user acceptance tests for 10 client requests
- Performed vendor analysis, market research and client scans to develop the firm’s Sourcing and Procurement practice capabilities in Canada
- Revamped a VBA internal visualization tool to analyze and develop practitioners’ brand within the firm

McKinsey & Company | Part-Time Assistant Beijing, China | Summer 2013

- Analyzed performance management data and delivered 30+ 360-degree analysis PowerPoint decks to the client

- Organized the Capability for Performance (C4P) event with client research resulting in attendance of 50+ companies

PROJECTS

Cryptocurrency Trading Bot

September 2017 – Present

Fully automated technical-analysis trading bot

- Designed the architecture and implemented all components including WebSocket data streaming from the Bitfinex Exchange, algorithmic trading based on technical indicators, ticker-price/candlestick/orderbook data processors, DB operators, and back-testers from scratch using Node.js
- Achieved an average daily return rate of 1.1% over the span of 3 weeks with an average of 46 trades/day
- Implemented a trade visualization tool to assist back-testing of trading strategies using React.js and HTML5

HackerNews Post Tagger

January 2017 – July 2017

News post genre tagging based on submission content and user comments with additional interesting statistics

- Implemented a full Natural Language Processing (NLP) pipeline from data-cleaning to parameter-tuning to tagging the posts using Latent Dirichlet Allocation (LDA) in Python
- Evaluated the Reddit dataset as a transfer learning opportunity for supervised learning using subreddits as tags
- Designed the user interface and REST APIs for data retrieval and distributed messaging between the web server and Python services that are used for computational-intensive operations

Configuration Management Tool

Citi | March 2017 – June 2017

A tool that provides a unified view of relevant property files, allowing developers to focus on “what” instead of “where”

- Implemented an Electron-based fully functional editor, and a mini lookup tool where selecting, finding, and filtering properties are all done through one centralized search bar using React.js and HTML5

Stock Trading Simulator

September 2016 – November 2016

A trading simulator streaming near real-time market prices in a risk-free environment for users to learn and strategize

- Designed and developed the user interface, REST APIs and created 6 scalable database schemas/tables to support portfolio management, user authentication, transaction analysis in PostgreSQL

Food Image Recognition Thesis

Western University | September 2015 – April 2016

- Achieved a 10-class image classification top-1 error of 1.93% using Convolutional Neural Networks (CNN) and Support Vector Machine (SVM) with self-tuned parameters derived from 10 leading computer-vision papers

EDUCATION

Western University | Major GPA 3.91

London, Canada | 2014 – 2016

Bachelor of Science, Honors Specialization in Computer Science, Minor in Economics

Ivey Business School, Western University

London, Canada | 2011 – 2014

(Discontinued) Bachelor of Arts, Honors Business Administration (HBA)

- Completed first two years of Specialization in Economics program, and third year in the HBA program

AWARDS

- Rising Star - Outstanding performance on the Velocity Desktop Application Team (1/20) Citi | 2017
- 1st Place at 18th Boston Consulting Group Ivey HBA Case Competition (1/80) Ivey Business School | 2013
- Dean's Honors List Western University | 2011 – 2016