Gordon Tang

EXPERIENCE

Recruit Programmer, App Dev CCPD/DPRC / *C#, Python*   July 2024 – current
Statistics Canada   *Ottawa, ON*
- Designed the new census tabulation engine and implemented small and large features such as generating grouping sets, templating consistent random rounding, configuring SSL/TLS security, researching improvements to performance and optimization, creating percentage and proportion statistics with confidentiality requirements. My work helped to advance the main objective of the CCPD of using open source technologies.
- Participated actively in team meetings and activities, as well as technical training though Pluralsight for open-source technologies for AI, data analysis, processing and visualization.
- Proactively sought learning and networking opportunities by participating in a 2-day Northern Data Inventory Hackathon, resulting in learning more about Statistics Canada organizational needs and operation.

Infrastructure Intern / *Microsoft Azure*   Sept 2022 – Dec 2022
Tecsys Inc.   *Montreal, QC*
- Maintained 99% uptime of our internal Azure environments while preparing for future network upgrades
- Streamlined Azure build pipeline by parameterizing 50 lines of code in the main config build file
- Configured log telemetry and monitoring of millions of live production logs in DataDog

Software Developer Intern / *Angular, Typescript, HTML/CSS*   May. 2022 – Sep 2022
Trading Central   *Ottawa, ON*
- Wrote 2 new front-end features in Typescript including a breadcrumb-navigation and a tutorial/feedback overlay
- Future-proofed internal stack by upgrading 5 build files from Angular 11 to Angular 13
- Maintained excellent UI/UX by fixing numerous UI bugs and ensured localization consistency

Software Engineer Intern / *Java, Docker, Kubernetes*   May 2021 – Aug 2021
Micro Focus   *Ottawa, ON*
- Designed a proof-of-concept audit logger for tracking every database call in Java's DropWizard framework
- Transitioned back-end no-SQL databases from Elasticsearch to OpenSearch and ensured upgrade consistency by manual testing in Docker/Kubernetes environments and writing extensive integration tests
- Increased test coverage from 52% to 78% with JUnit testing according to SonarCube code quality sniffer

EDUCATION

Carleton University   Ottawa, ON
Bachelor of Computer Science Honours Stream: Artificial Intelligence and Machine Learning   *Sept. 2019 – Dec 2023*
- High Distinction (11.4/12.0 CGPA)

PROJECTS

Character Sentiment Network from Movie Scripts (Honours Project) / *Jupyter*   Sept 2023 – Dec 2023
- Do Extract-Transform-Load on different formats and sources into a consistent csv using Pandas/Google Drive
- Applied custom hate/intimacy/irony/polarity NLP sentiment metrics on movie dialogues
- Derived several networks with an ensemble of emotion metrics and validated results automatically
- Discovered hidden structures with a custom decomposition algorithm and networkX community clustering libraries
- Visualized all results with MatPlotLib and wrote a formal paper for final grading

Finance Dashboard / *sklearn, Plotly, Scipy, Pytorch*   May 2020 – Dec 2023
- Developed a full-stack bond yield dashboard with Plotly/Flask/Heroku
- Used Bank of Canada bond yield API as the data source and cleaned data with Pandas
- Implemented RNN/LSTM/Linear Regression models for time series forecasting

Save The Whales CANDEV Winner / *pandas, Matplotlib*   Feb 2022
- Achieved 1st under Department of Fisheries and Oceans and was the 2nd overall winner
- Overlayed geospatial raster information with whale habitation probability with Geopandas/Hololens
- Designed a risk metric based on speed of ship, type of ship, location of ship and habitation probability
- Created a dashboard mockup in Figma and formulated a holistic solution with technical and non-technical parts