Noah Frank

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WORK EXPERIENCE

Aetion (Replica Analytics) — Victoria, BC (Remote)
Machine Learning Engineer II — Feb. 2023 - Jun. 2024
Machine Learning Engineer I — Nov. 2021 - Feb. 2023

- Developed a scalable synthetic data generation pipeline, integrating machine learning models into production software
- Optimized ML pipelines to scale with large datasets using distributed computing to reduce run times by up to 90%
- Led the cross-team collaboration between data science and engineering teams to integrate research findings into the product
- Deployed an automated benchmarking system to track model performance and fidelity, saving 10 hours per week

XplorSpace — Vancouver, BC (Remote)
Data Science and Machine Learning Intern — Jun. 2021 - Aug. 2021

- Trained a real-time computer vision model using transfer learning to detect and monitor offshore vessels with 0.9 IoU
- Implemented and presented a proof-of-concept for a time-series model to predict continuous blood pressure measurements
- Prepared detailed reports to effectively communicate ML findings to stakeholders of varying technical backgrounds

Nokia — Ottawa, ON
Network Solutions Specialist (Co-op) — May 2019 - Aug. 2019

- Automated router configuration scripts to enhance the network management user experience, reducing manual input by 80%
- Augmented the testing and validation of customer network configurations, improving configuration reliability by 50%
- Generated and communicated data-driven reports to visualize the impact of automated network configurations

Web Software Developer (Co-op) — May 2018 - Aug. 2018

- Engineered a data visualization dashboard for network traffic on an internal tool, enhancing the user experience by 20%
- Maintained and tested full-stack web applications using Java, SQL, and JavaScript in a production environment
- Collaborated with a team of software developers in an agile environment to define and deliver new features on schedule

EDUCATION

McMaster University — Hamilton, ON
Master of Engineering, Electrical & Computer — May 2020 - Apr. 2021

- Graduated Summa Cum Laude, 4.0 GPA
- Relevant Courses: Digital Signal Processing, Data Science, Matrix Computations in Signal Processing

Bachelor of Engineering, Electrical & Biomedical — May 2020 - Apr. 2021

- Graduated Summa Cum Laude, 3.6 GPA
- Relevant Courses: Statistics, Data Structures and Algorithms, Modelling of Biological Systems

PROJECTS

Mammogram Segmentation U-Net

- Applied a deep learning-based segmentation model using convolutional neural networks for pectoral muscle detection in mammograms, a key component in medical image analysis and early-stage breast cancer screening

Board Game Genre Classifier

- Launched an NLP-based classification system using logistic regression with Scikit-Learn, applying natural language processing techniques for the analysis and categorization of board games by genres based on their written descriptions

SKILLS

Machine Learning: Distributed Computing, Decision Trees, Gradient Boosting, Data Visualization, Statistical Analysis
Programming: Python (Advanced), SQL (Intermediate), R (Basic)
Tools & Frameworks: Scikit-Learn, Pandas, Ray, Spark, Numpy, Scipy, Keras**,** TensorFlow, MLflow, Jupyter, Git, Docker
Certifications: IBM Machine Learning Professional Certificate (Coursera)
Involvement: NeuroTechX McMaster Student Club, McMaster Artificial Intelligence Society