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Summary

Master of Computer Engineering graduate with 2+ years of co-op experience and project work with Python, R, and SQL. Shows understanding of current machine learning research through the implementation of a computer vision system to assist physicians with breast cancer screening. Proven track record of software development working on Nokia's network management software, used by clients globally. Exhibits curiosity and creativity while working on personal projects to expand data science skills. Looking to leverage my data science abilities to help make an impact.

Projects

Mammogram Segmentation Using Modified U-Net May 2020 – Apr. 2021
- Independently worked on a modified U-Net segmentation model for breast cancer screening
- Model was able to process and segment a raw mammogram with 99% anatomical accuracy
- Demonstrated proficiency with machine learning in Python, TensorFlow, OpenCV

Board Game Genre Classifier Apr. 2021
- Implemented a logistic regression model to predict board game genres from their descriptions using natural language processing tools and libraries such as Scikit-learn
- Showcased skills in web scraping by retrieving content and data directly from board game website

Data Science Course Projects Jan. 2021- Apr. 2021
- Carried out many statistical analyses using R for regression, clustering, and classification
- Gained experience with methods such as Random Forests and Gradient Boosting Machines
- Generated reports to draw conclusions from the data and the problems addressed

Patient Information Anonymizer Oct. 2020
- Developed software to automate the anonymization of personal information in medical images
- Worked alongside physicians and researchers to ensure quality of patient data for research

Experience

Data Science and Machine Learning Intern – XplorSpace Jun. 2021 – Aug. 2021
- Implemented a computer vision model to detect and track the movement of offshore vessels
- Developed a time-series model to predict continuous blood pressure measurement non-invasively
- Researched current machine learning methods to improve performance and implement results
- Attended daily meetings and created reports to provide detailed updates on project progress

Network Solutions Specialist Co-op – Nokia May 2019 – Aug. 2019
- Refined the network management user experience by automating router configuration
- Collaborated with the automation team to develop YAML scripts for configuring network nodes
- Used Python to automate testing and validation of customer network configurations
- Generated reports to visualize and evaluate the impact of automated network configurations

Web Software Developer Co-op – Nokia May 2018 – Aug. 2018
- Developed data visualizations of network traffic for Nokia's network management software
- Created and maintained full-stack web applications using Java, SQL, and JavaScript
- Demonstrated ability to cooperate with team in agile environment using JIRA and Confluence

Programming Instructor – Hatch Coding Apr. 2017 – Jul. 2017
- Displayed strong interpersonal skills while teaching programming basics to a class of 40 students
- Developed course work tailored to each student's unique learning style
- Demonstrated strong teamwork skills while coordinating teaching duties with staff members

Education

McMaster University
Master of Engineering, Electrical & Computer Engineering May 2020 – Apr. 2021
- Course and project-based degree, 4.0/4.0 GPA
- Researched computer vision systems for mammography segmentation
- Relevant courses: Biomedical Signal Processing, Data Science, Neural Modelling

McMaster University
Bachelor of Engineering, Electrical & Biomedical Engineering Sep. 2016 – Apr. 2020
- Graduated Summa Cum Laude, 3.6/4.0 GPA
- Honors Entrance Scholarship, Dean's List 2016-2020
- Relevant courses: Statistics, Digital Signal Processing, Data Structures and Algorithms

Skills

Technical Skills:
- Statistics
- Data Analysis
- Data Modeling
- Data Visualization
- Machine Learning
- Debugging
- Software Development

Languages:
- Python
- R
- SQL
- MATLAB
- Java
- JavaScript
- C

Tools and Frameworks:
- TensorFlow
- Keras
- Pandas
- Jupyter Notebook
- JIRA
- GitHub
- Microsoft Excel

Extracurricular Activities

NeuroTechX McMaster Student Club
- Member of signal processing division of the McMaster NeuroTechX team
- Used Python libraries to aid in the detection of neural activity in EEG recordings
- Coordinated with data acquisition team to create a pipeline for processing EEG signals

McMaster Artificial Intelligence Society
- Attended hands-on tutorials to develop basic skills for working with data and machine learning
- Participated in discussion groups to brainstorm machine learning project ideas