Carter Conboy

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Skills

Python: Experienced in cleaning, transforming and analysing real-world datasets, and in implementing and applying foundational ML algorithms (PySpark, NumPy, Pandas, PyTorch, scikit-learn, SQL).

Machine Learning and Statistical Analysis: Proficient in model evaluation, hyperparameter tuning, and hypothesis testing, with expertise in classification, regression, and clustering techniques.

Education

MEng Applied Data Science	**GPA: 8.73/9.00**	**09/2024 – Present**
University of Victoria		Victoria BC
BASc Computer Engineering	**First Class Honours**	**09/2019 – 04/2024**
Queen's University		Kingston ON

Projects

Marine Mammal Vocalization Classifier   **01/2024 – 05/2024**

- Achieved a highly performant solution for 12-class classification of Marine Mammal Vocalizations with a convolutional neural network (F1 Score: 0.81).
- Improved accuracy by 5% via hybrid signal processing and computer vision techniques for feature extraction.
- Produced a comprehensive dataset through development of parallelized data collection and transformation pipeline in Python.

DNA Function Predictor   **09/2024 – 12/2024**

- Upgraded a hybrid neural network for the prediction of non-coding DNA function, eliminating 3 deprecated dependencies and reducing required training memory by 94%.

Work Experience

IT Developer Internship   **04/2023 – 08/2024**
Queen's University IT Services   Kingston ON (Hybrid)

- Enabled single administrator management of MFA tokens for a 3k+ user base by developing an extensive API interface in PowerShell.
- Produced automated scripts to optimize several data collection and identity management processes previously requiring multiple administrators/platforms.

Cyber Security Developer Internship   **04/2021 – 01/2022**
DND Information Management Engineering   Ottawa ON (Remote)

- Modernized a cyber-capability assessment application by introducing cross-platform operation and a responsive interface.
- Realized full-stack migration of a large .NET web application through redesign and implementation of relational data model.