Alexander Cooper

✉ alec.n.cooper@gmail.com

⌨ /AlecCooper

in /alexander-cooper-646772108/

⌂ https://aleccooper.github.io/

Languages	**Libraries**	**Databases**	**Tools**
Python	NumPy	MySQL	Linux/Unix
	PyTorch	BigQuery	Google Cloud
	SciKit-Learn	Excel	LaTeX
	Matplotlib		Git
			Docker

Projects

Inuktitut-English Word Classifier

- Inuktitut-English word classifier built with LSTM and convolutions neural networks
- Cleaned, parsed and tokenized a large training dataset
- Achieved a high degree of accuracy on test data after hyperparameters tuning

Tools: Python, NumPy, PyTorch

Recreation of Self-Learning Monte Carlo Methods

- Developed software as part of a small team
- Wrote an implementation of algorithms presented in a scientific paper
- Preformed a Monte Carlo simulation with a self learning update algorithm using linear regression

Tools: Python, NumPy, Scikit-Learn

Experiments on MNIST Dataset

- Implemented a multi-label classifier and variational autoencoder using various neural network architectures
- Increased model performance using various hyperparamater tuning techniques

Tools: Python, NumPy, PyTorch

Education

Bachelors of Science, Physics. University of Waterloo. 2020.
- Relevant Courses: Machine Learning in the Physical Sciences, Computational Physics I/II
- Varsity Track and Field

Work

Administrative Counselor at Frontier College   *2018-2019*

- Worked in a team to run a literacy camp in remote First Nations/Inuit communities of Attawapiskat and Inukjauk
- Managed a budget, organised community events, implemented a curriculum and dealt with the unique challenges of a northern life

Camp Director at STEM Camp   *2017*

- Scheduled activities, supervised staff and implemented a curriculum based on Science, Technology, Engineering and Math

Crew Manager at College Pro Painters   *2016-2017*

- Worked in a small team, assisted in training and supervision of new employees
- Demonstrated a high degree of organization and attention to detail

Certifications:

Google Cloud Qwiklabs Profile
- Google Cloud Essentials, Data Science on Google Cloud, Machine Learning APIs, Baseline: Infrastructure, Baseline: Data, ML, AI, BigQuery Basics for Data Analysts