Ngawang (Choenden) Kyirong

ckyirong@sfu.ca   https://ckyi.me

Interests	Practical applications of ML, AI audio/music, MLOps, Software Development

Education

Simon Fraser University   Burnaby, British Columbia
B.Sc in Computer Science   Jan 2018 – Present
B.Sc in Statistics   Jan 2018 – Present

University of Toronto   Toronto, Ontario
Jazz Performance   Sept 2014 – April 2016

Selected Coursework

- Computer Science: Machine Learning, Natural Language Processing, Data Science, Software Development Methods, Data Structures
- Statistics: Statistical Learning & Prediction, Learning from Big Data, Mathematical Statistics, Bayesian Statistics, Linear Models

Technical Skills

Programming Languages
Python, JavaScript, R, SQL

Python Libraries
PyTorch, TensorFlow, Pandas, NumPy, Matplotlib, Scikit-learn, Spacy, Flask

Software Development
Node.js, Express.js, Mongoose, Docker, CI/CD, Gitlab, MVC

Employment

WorkSafeBC, Innovation Team   Richmond, British Columbia
Machine Learning Engineer Intern   Incoming Summer 2021

BetterCart, Development Team   Saskatoon, Saskatchewan
Data Scientist & Software Development Intern   Jan 2021 - Present
Created a test suite that identifies mislabelled data. Helped automate training data generation for a NER pipeline using Spacy.

CBSA, Data Analytics Division   Ottawa, Ontario
Data Scientist Intern   Summer 2020
Implemented a language identification tool using a n-gram char model in pytorch. Contributed to an adjusted SIRD model to analyze and predict how COVID-19 spreads.

Parliament of Canada, House of Commons   Ottawa, Ontario

Parliamentary Intern   Summer 2018

Created briefings, research topics, meeting summaries, and assisted with public affairs tasks such as providing material to filibuster for a Member of Parliament.

Projects	**Hope Health Action,** Software Development Spring 2021

Node.js, Express.js, Docker, Mongoose, Gitlab, CI/CD

Automated development process by constructing a continuous integration & continuous deployment pipeline. Led back-end engineering for MVC design, data modelling, and built a variety of endpoints and services.

Port Moody Church, Software Development   Fall 2020

Node.js, Express.js, HTML, CSS, MySQL, Google Cloud Platform, Zoom API

Enabled users to create and attend meetings using the Zoom API. Implemented a donation service using the PayPal API.

Music Generation, Machine Learning   Spring 2020

Deep Learning, TensorFlow, Keras, NumPy, Pandas, Music21

Generated music using a LSTM and a Bi-Directional LSTM with Attention using midi files of classical based piano music.

Toxic Comment Classification, Machine Learning   Fall 2019

Deep Learning, PyTorch, Keras, Pandas, Numpy, MatPlotLib, Jupyter

Achieved 90% accuracy for multi-label classification of toxicity level of tweets. Used a 200-D GloVe embedding produced as input into a LSTM model.

Teaching/Talks	**Statistics Mentor** Fall 2020

Mentored undergraduate statistics students at SFU.

BC Student AI Showcase   Dec 2019

Presented project on Toxic Comment Classification using Deep Learning

Java Workshop   May 2018

Instructed a class on Java and OOP concepts for 60 high school students.

Awards/Scholarships	2nd Place Technical Solution (SFU Business Analytics Hackathon)	2020
	3rd Place Overall (Spotless Hackathon)	2017
	Moe Koffman Memorial Jazz Scholarship (University of Toronto)	2014
	Entrance Scholarship (University of Toronto)	2014

Other Interests	Music composition, Piano, Trombone, Basketball, Soccer, Chess