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https://nafabrar.github.io https://github.com/nafabrar



#### **EDUCATION**

4th year

B.Sc. in Computer Science at University of British Columbia

Vancouver

Focus on Machine Learning

Notable courses: Intelligent Systems/AI, Machine Learning, Advanced Database, Internet Computing, Software Engineering, Statistical Learning.



Jan 2018 - • Present

## SCIENTIFIC SOFTWARE DEVELOPER

at BC Cancer Research Centre (Sohrab Shah Lab)

- Improved the BCCRC software infrastructure to support research tasks by implementing new functionalities using Django.
- Performed data analysis and implemented machine learning algorithms for cancer cell classification problems using Python libraries.
- Implemented, extended and documented python APIs and REST interfaces.
- Modified and maintained existing databases and web front end.

May 2017 -Sept 2017

### **FULL STACK WEB-DEVELOPER**

at UBC EOSC (Earth and Ocean Sciences)

- Contributed to the backend of the UBC EOSC website by creating models, views and forms using Django.
- Exported CSV files from older Drupal7 UBC website and wrote Python scripts that automatically created objects in the new Django website using the CSV data. This resulted in loading 1000+ records in the new website.



## **RELEVANT PROJECTS**

June-Present •

## PIMS BC DATA SCIENCE NLP CAPSTONE PROJECT (COMM100) Language: Python Frameworks: Scikit Learn

- Currently working in a team of 10 to determine intent and create knowledge base from live chat transcripts. The data set is provided by Comm100 which includes online chat sessions.
- The goal of the project is to cluster or correlate chat sessions and build a knowledge base in an automated way using mathematical models.

October-November 2017 Personal Project

## MACHINE LEARNING/DATA SCIENCE

Language: Python Frameworks: Scikit Learn

- Implemented supervised and unsupervised machine learning algorithms with Python (pandas, numpy). The following algorithms are implemented: Linear Regression, Kmeans, KNN, RBF-Kernels and Stochastic Gradient Descent.
- Built a sentiment analyser that extracts data from Twitter given a topic. The data from the Twitter API is then processed to give a result of how people feel about the user provided topic.

August 🍙 2017 Personal Project

#### RHOADS- A BLOG WEBSITE

Languages: Python(Django Framework), HTML, CSS, JS

- Rhoads is an interactive blog website that allows users to signup and post their blogs. The data is stored in SQLite database. The website uses a token system to verify email during user signup. Users can also view other users blogs as guests.
- The front-end uses HTML, CSS (Bootstrap) and JavaScript. A website preview is available on my Github account.

### **Programming Languages**

- Competent (2 years) Projects: Restaurant App, Advanced Calculator, DNS Server, FTP Client, Gym Database using JDBC
- Basic (8 months) Projects: FTP Server, x86 implementation
- Python Competent (2 years) Projects: Machine learning algorithms, Django-UBC EOSC website, Rhoads, NLP
- SOL Competent (1 year) Projects: GYM Database, UBC EOSC website
- Unix/bash Competent(1 year)



### Web development and Design

- HTML and CSS -Competent(4 months) Projects: UBC Eosc website, Rhoads website
- TypeScript/node.js\* -Basic (2 months) Projects: Insight UBC
- Django -Proficient (8 months) Projects: UBC EOSC website, Rhoads website



## Machine Learning/Data Science

- Python scikit-learn, Pandas, matplotlib Projects: Image classifier and Stock Price Predictor
- TensorFlow\*
- Microsoft Azure

<sup>\*</sup>Currently Learning