# Sarbottam Thapa Magar

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#### **Experience**

#### **Research Intern**

May 2019 - Oct 2019

GreyLit Inc., Halifax, NS, Canada

#### Overall Responsibilities:

Implemented Document indexing and searching application with AWS Serverless architecture using python and Flask.

- Automated the extraction and indexing of documents using different AWS services like S3 Bucket, Lambda, Elasticsearch and AWS Machine Learning services.
- > Code review, testing and, documentation

#### **Junior Android Developer**

May 2016 - March 2018

Mero Design Pvt. Ltd. Kathmandu, Nepal

#### Overall Responsibilities:

Collaborate with other domain developers to analyze, design and implement the software products according to client specification.

- ➤ Built Android Mobile Applications using Fragment API, RESTful Web Services, and other third-party libraries using Java MVC.
- > Ensure Software Quality
- Code review, testing, and documentation

# **Education**

# MSc. In Computing and Data Analytics

Aug 2018 – May 2020

Saint Mary's University, Halifax, Nova Scotia, Canada, B3H3 C3

**Relevant Coursework**: Statistics & its Application in Business, Business Intelligence & Data Visualization, Data & Text Mining

#### Bachelor's in Computer Engineering

Dec 2011 - Dec 2015

Tribhuvan University, Kathmandu, Nepal

**Relevant Coursework:** Object oriented programming with C++, Data Structure and Algorithms

# **Projects**

# House price prediction (<a href="https://bit.ly/house-project-live">https://bit.ly/house-project-live</a>)

Used Random Forest Regressor to predict the price of the house based on important characteristics of house.

- ➤ Full-stack data science project involving Exploratory Analysis, Model Building, API Development and Deploying the model in production.
- ➤ Used different feature engineering and feature selection technique to select most important features which improved the model prediction.
- > RandomSearchedCV was used for tuning the hyperparameters of the model.
- ➤ Built Machine Learning Pipeline using scikit-learn pipeline architecture for automating the machine learning workflow.
- ➤ Model was served through RESTful API using Flask and later deployed as Web App in PythonAnywhere server.

#### Popular Data Science Tags (http://bit.ly/pplr\_tags)

Analyzed data from StackExchange public database to understand about the popular tags being used to post questions in the Data Science community.

- Found out Python is a more popular language used as a tag in questions posted with 11.17% more than R.
- > Used Apriori algorithm to generate rules for tags used together in the posts.

# Image classification using Tensorflow-Keras framework (http://bit.ly/dlp\_models)

➤ Built Dog-Breed classification using Transfer learning with MobileNet V2 and deployed the model as web application using docker and TensorFlow serving.

#### **Profile**

# Portfolio Website:

bit.ly/STM\_portfolio

#### GitHub

https://github.com/Mattobad/

# Tableau Profile:

http://bit.ly/STM\_tp

#### Skills

# Programming Languages:

Python | Java

# Data Science:

Data Analysis (NumPy, Pandas)
Data Visualization (Matplotlib, Seaborn,

Plotly)

BI tool (Tableau)

Supervised learning (Linear Regression, Logistic Regression, Random Forest etc.) Unsupervised Learning (Clustering, K-

means)

**Deep Learning** (TensorFlow-Keras, Image Classification)

Model Deployment (Flask-API,

TensorFlow Serving)

**Other** (Structured, Semi-structured & Unstructured data types, Time Series Analysis, Sentiment Analysis)

#### Cloud:

**AWS** (S3, Lambda, ElasticSearch, Comprehend, SageMaker, AWS Machine Learning Services)

# Others:

SQL | Bash | Docker | Git

# Operating System:

Windows | Linux | Unix

# **Awards & Achievements**

# Innovation Challenge Halifax 2019, Sept-2019

Finalist- Ocean Category Saint Mary's University

# David Sobeys Annual Retail Hackathon, April-2019

Saint Mary's University (Runner up)

NS Open Data Contest, March 2019
Dalhousie University (Second Position)