# Sujan Tamang

sujanay@hotmail.com | 234-817-6903 | New York | sujanay.github.io

# SKILLS

### **TECHNOLOGY STACK**

PySpark Scikit-learn, Tensorflow, PyTorch Pandas, Matplotlib and Seaborn Git and Github S3, EC2, SageMaker, Route53, CloudFormation, IAM, EMR Python, C++, Java Hive and SQL HTML, CSS, JavaScript Windows, Linux, Mac

#### **ML AND STATISTICS**

Regression
Naive Bayes
K-Nearest Neighbors
Decision Trees
Bagging and Boosting
Cluster Analyses
Image Classification
Object Detection
Statistical Modeling
Hypothesis Testing

# **EDUCATION**

#### MS, COMPUTER SCIENCE

YOUNGSTOWN STATE UNIVERSITY 2016 - 2018 | Youngstown, OH

#### BE, ELECTRONICS ENGG.

TRIBHUVAN UNIVERSITY 2010 - 2014 | Lalitpur, Nepal

# **PROJECTS**

## PREDICTING BREAST CANCER

GitLab: Project Link

# LINKS

LinkedIn://sujan-tamang Github://sujanay GitLab://sujanay StackOverflow://@14636531 Kaggle: //sujanay

## **EXPERIENCE**

#### THE CLIMATE CORPORATION | DATA SCIENTIST

July 2019 - Jan 2021 | St. Louis, MO

- Working on analyzing customer's agronomic data to create value to our customers and the company
- Successfully built data processing pipeline using PySpark that processes over 5TB of customer's agronomic data in spark cluster at user specified cadence
- Performed EDA on the customer data and created insights to support various business decisions
- Worked on customer segmentation to provide tailored solutions to customers
- Design statistical model to test hypothesis
- Worked on packaging and shipping python package to internal package artifactory to share and enable cross-team access
- Document and share work among other teammates for collaboration and visibility of work
- Use git for version control and reviewed other people's code for bug fixes and to ensure the code meets the PEP8 coding standards

## C2P GROUP | AI DEVELOPER

July 2018 - Dec 2018 | Brooklyn, NY

- Work on building deep learning based image recognition system for products in retail industry to enable automatic retail checkout.
- Evaluated business requirements and prepared detailed specifications that follow project guidelines required to develop written programs.
- Implemented Data Exploration to analyze images and to select Deep Learning and CNN architectures using Python SciPy, NumPy and Keras.
- Built Object Detection and Object Classification model using TensorFlow's Object Detection API.
- Used state-of-the-art Deep Learning Architecture (faster R-CNN inception v2) and to train the Object Detection model with Back Propagation, Batch Gradient Descent and Adam Optimizer algorithm.
- Trained the Object Detection model on a Google Cloud GPU (NVIDIA Tesla V100) and local GPU (NVIDIA GeForce GTX 1080 Ti) Server.
- Evaluated the performance of the trained model with ROC and AUC.
- Perform Hyperparameter Tuning to fine tune the model for boosting the Accuracy.
- Built a Flask API to serve the trained model in Heroku to explain and communicate the insights, model scores and performance of the model to both technical and business teams.
- Used Agile methodology and SCRUM process for project developing.

## YOUNGSTOWN STATE UNIVERSITY | RESEARCH ASSISTANT

Aug 2016 - May 2018 | Youngstown, OH

- Utilized an ensemble learning algorithm (Gentle AdaBoost) to detect nanoparticles in Transmission Electron Microscope (TEM) image.
- Developed a series of coding tools based on C++ and Python for image processing and augmentation of dataset.
- Performed 160 experiments using Amazon EC2 to compare the performance of two special image features: Haar, Local Binary Pattern.
- Significantly improved the performance of object detection model from 87
- This is an interdisciplinary project in collaboration with department of chemistry.