

Siddhanth (Sid) Unnithan

3B Systems Design Engineering Student

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EXPERIENCE

Data Scientist, Capital One Data Science Lab Fall 2016

- Pioneered model allowing credit card holders to determine the likelihood of undergoing a fraud transaction using scikit-learn, Redshift, Pandas, and Hive
- Used Terraform and Docker to construct an application deployment framework enabling the public release of features to 700+ mobile users

Data Engineer, WatrHub Inc. Winter 2016

- Built document search engine to perform content searching and dataset filtering using Elasticsearch and Kibana
- Used S3, MongoDB, PostgreSQL, and Docker to design and implement infrastructure for terabyte storage of permit documents and utility data
- Wrote 23 web scrapers to optimize wastewater utility data collection from 13 states across the USA
- Designed, developed, and benchmarked production ETL pipelines

Software Developer, TD Asset Management Fall 2014 & Summer 2015

- Built financial security modelling tool with real-time and historical stock/bond data-retrieval capabilities using Python, SQL, and Bloomberg API
- Enhanced portfolio optimization tool through the implementation of new cash-flow and key-rate duration constraints
- Developed web tool to automate creation and aggregation of LDI curves

Co-President, University of Waterloo DECA Winter 2015 – Winter 2016

- Led team of 20 towards organization of national business and technology conference attended by 150 students and 48 industry professionals
- Raised \$27,550 in sponsorship funding (28% increase year over year)
- Organized networking and competitive events for 237 club members

PROJECTS

Bot Engine

- Developed a Python framework enabling non-developers to rapidly prototype and deploy Facebook Messenger bots through a simple JSON specification

Easy-Budget Messenger Bot

- Designed and developed a Facebook Messenger bot allowing individuals to log and track their income and expenses, while setting personal goals
- Pitched to *Prosper Canada* to use bot as new budgeting application for low-income households

Bosch Production Line Performance - Kaggle Competition

- Built model using Random Forest classifier to predict at-risk parts of Bosch production line with precision of 89.2%
- Analysed feature set and formulated data cleaning methods to improve pre-processing step for continuous features

Allstate Claims Severity - Kaggle Competition

- Wrote a regressor to predict insurance claims' severity using Linear Support Vector and Random Forest estimators with ensemble-based feature selection methods

SKILLS

Programming Languages

Python, C++

Analytics and ML Tools

Elasticsearch, Kibana, pandas
NumPy, scikit-learn, SciPy
Jupyter, Matplotlib

Databases

PostgreSQL, MongoDB, MSSQL
Hive, Redshift, Teradata
MySQL

Infrastructure

Docker, Terraform
AWS – EC2, S3, ELB, EMR

Web

HTML/CSS, JS, Dojo
Django, Flask, Apache Nutch

EDUCATION

Systems Design Engineering

University of Waterloo
Class of 2018

RELEVANT COURSES

Machine Intelligence
Design Optimization Under
Probabilistic Uncertainty
Data Structures and Algorithms

HACKATHONS

Gift The Code
ISRM Hacker-thon

INTERESTS

Podcasts
Kaggle competitions
Science fiction novels
Hip hop music