

SIDDHANTH UNNITHAN

4th year Systems Design Engineering Student

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github.com/SiddhantUnnithan

EXPERIENCE

Data Scientist, Capital One Data Science Lab Fall 2016

- Pioneered merchant scoring model allowing credit card holders to determine the likelihood of fraud using Redshift, Hive, Pandas, and Boruta
- Constructed an application deployment framework to enable public release of features to 700+ mobile users, using Terraform and Docker

Data Engineer, WatrHub Inc. Winter 2016

- Designed and implemented data model for petabyte storage of permit documents and utility data using S3, MongoDB, and PostgreSQL
- Built document search engine to perform content searching and dataset filtering using Elasticsearch and Kibana
- Wrote 23 web scrapers to consolidate wastewater utility data from 13 states across the USA
- Designed, developed, and benchmarked Python ETL pipelines

Analytics Developer, TD Asset Management Fall 2014 & Summer 2015

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

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 replace their existing 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

REDEFINE - Waterloo DECA Conference

- Led a team of 20 towards organization of national business and technology conference attended by 150 students and 48 industry professionals
- Increased delegate attendance by 86% year over year
- Raised \$27,550 in sponsorship funding (28% increase from 2015)

SKILLS

Programming Languages

Python, C++

Analytics and ML Tools

Elasticsearch, Kibana, Pandas
Numpy, scikit-learn, BorutaPy

Databases

PostgreSQL, MongoDB, MSSQL
Hive, Redshift, Teradata

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

EXTRACURRICULARS

Co-President

University of Waterloo DECA
May 2015 - April 2016

HACKATHONS

Gift The Code
ISRM Hacker-thon

INTERESTS

Podcasts
Kaggle Competitions
Science Fiction