

Dryden Bouamalay

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EDUCATION

CALTECH

B.S. COMPUTER SCIENCE
2012 - 2016 | Pasadena, CA

COURSEWORK

COMPUTER SCIENCE

Algorithms
Machine Learning & Data Mining
Computer Architecture & Systems
Relational Databases
Functional Programming

MATHEMATICS

Probability & Statistics
Linear Algebra
Discrete Mathematics

PHYSICS

Lagrangian & Hamiltonian Mechanics
Electrodynamics
Quantum Mechanics
Statistical Mechanics
Differential Geometry

TECHNICAL SKILLS

PROGRAMMING

Proficient:

• Python • C++

Familiar:

• SQL • Bash
• Scala • C

FRAMEWORKS, ETC.

• Git • Kafka
• Docker • Spark
• scikit-learn
• AWS • GCP

DATABASES

• PostgreSQL • Elasticsearch

FOREIGN LANGUAGE

• Japanese - *Intermediate*
• Attic Greek - *Beginner*

EXPERIENCE

CRUNCHBASE

DATA ENGINEER

October 2017 - Present (9 months) | San Francisco, CA

- Responsible for end-to-end architecture and implementation of several production pipelines. **Python, Kafka, PostgreSQL, Elasticsearch.**
- Tackled challenges such as data disambiguation and data quality from both technical and business perspectives.
- Created supervised and unsupervised machine learning models to drive new projects and create value. Projects included topic modeling (LDA, NMF, k-means) as well as multilabel classification. **scikit-learn.**

NETWORKED INSIGHTS

DATA ENGINEER

October 2016 - October 2017 (1 year) | Chicago, IL

- Implemented ETL for social media analytics applications targeting cosmetic and movie marketing verticals. **Python, PostgreSQL, Google BigQuery.**
- Used NLP techniques to perform multilabel classification and text processing. **Beam, Spark.**
- Optimized graph clustering algorithms to perform topic clustering on social media posts. **Python.**

CRABEL CAPITAL MANAGEMENT LLC

SOFTWARE ENGINEER INTERN

June 2016 - August 2016 (3 months) | Century City, CA

- Developed software to interface with highly-efficient and proprietary binary market data storage for backtesting high-frequency trading strategies. Software extensively used template meta-programming. **C++.**
- Implemented an order book for the Eurex Exchange. **C++.**
- Converted FIX/FAST market data to proprietary storage with, QuickFAST, a C++ library. Automated data conversion and processing with Python. **C++, Python.**

PROJECTS

SONNET GENERATION WITH HIDDEN MARKOV MODELS

- Implemented the EM algorithm from scratch to train the parameters of a Hidden Markov Model on Shakespearean sonnets. Sample sonnets were generated using the trained matrices. **Python.**

SMART GAME FORMAT PARSER

- Developed a parser for SGF files using FastParse, a Scala parser-combinator library. **Scala.**

SPEECH SENTIMENT CLASSIFICATION

- Classified speeches with random forests, using boosting and bagging methods where appropriate. Final models were selected via ensemble methods. **scikit-learn.**