

Dryden Bouamalay

✉: bouamalayd@gmail.com

in: <https://www.linkedin.com/in/drydenb> | <https://github.com/drydenb> | <http://www.drydenbouamalay.com>

EDUCATION

CALIFORNIA INSTITUTE OF TECHNOLOGY

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

COURSEWORK

COMPUTER SCIENCE

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

MATHEMATICS

Linear Algebra
Discrete Mathematics
Probability & Statistics

PHYSICS

Lagrangian & Hamiltonian Mechanics
Classical Electrodynamics
Quantum Mechanics
Statistical Mechanics
Differential Geometry

SKILLS

PROGRAMMING

Proficient:

• Python • C++

Familiar:

• Scala • Bash
• C • PostgreSQL

FRAMEWORKS, ETC.

Familiar:

• Git
• Kafka • Spark
• Docker
• AWS • Google Cloud Platform

FOREIGN LANGUAGE

• Japanese - *Intermediate*

EXPERIENCE

CRUNCHBASE

DATA ENGINEER
October 2017 - Present | San Francisco, CA

NETWORKED INSIGHTS

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

- Designed RDBMS architectures and implemented ETL for SaaS applications using Python, PostgreSQL, and Google BigQuery.
- Processed textual data using Google Cloud Dataflow (Apache Beam) and Google Cloud Dataproc (Spark).
- Ingested JSON data from providers with Python and deposited results into PostgreSQL instances on AWS RDS.
- Implemented a graph clustering algorithm to gain insight on social media data with Python.

CRABEL CAPITAL MANAGEMENT LLC

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

- Developed C++ software to interface with proprietary market data storage for backtesting high-frequency trading strategies.
- Tested and debugged order book implementations for the Eurex Exchange.
- Engineered solutions to convert FIX/FAST market data to proprietary storage with the QuickFAST C++ library. Automated data conversion and processing with Python.
- The majority of the software was developed and designed in C++ using templates and object-oriented design patterns in Fedora Linux.

PROJECTS

GENERATING SONNETS WITH HIDDEN MARKOV MODELS

- *Python*: Implemented the EM algorithm to train the parameters of a Hidden Markov Model on 154 of Shakespeare's sonnets. Sample sonnets were generated using the trained model.

SMART GAME FORMAT PARSER

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

TEXT CLASSIFICATION WITH SCIKIT-LEARN

- *Python*: Classified speeches with decision trees and random forests, using boosting and bagging methods where appropriate. Final models were selected via ensemble methods.