# **ERIK COWLEY**

Data Scientist https://datascience.stromsy.com https://github.com/ekoly https://www.linkedin.com/in/stromsy/

# SKILLS

- Languages: C, C++, Python, Bash Shell, PostgreSQL, SQLite, Java
- Technologies: pandas, sklearn, flask, Plotly/Dash, seaborn, spacy, keras, Bootstrap, ROS, docker

# DATA SCIENCE PROJECTS

UFC Fight Prediction, Lambda School, https://github.com/ekoly/ufc-fight-prediction, 2020

- Utilized a RandomForestClassifier optimized with RandomizedSearchCV to predict the outcome of UFC fights, with a ShapExplainer to reveal the most important factors
- Deployed a Plotly Dash app where the user can select fighters and see who would likely win
- Twitoff, Lambda School, <u>https://github.com/ekoly/twitoff-app</u>
  - Used a LogisticRegression to analyze tweets of two specific accounts by their basilica.ai embeddings.
  - Cached models using Redis
  - Deployed a Flask app allowing the user to enter text and determine which twitter account is more likely to tweet it

AirPrice, Lambda School, <u>https://github.com/build-week-optimal-pricing/Data-science</u>

• Analyzed AirBnB listings in Berlin and utilized a XGBRegressor to determine the optimal price at which an owner should rent out their property

# **RELEVANT EXPERIENCE**

# Associate Engineer

ScienceLogic

- Implemented monitoring software for concurrently collecting CPU, memory, and network usage, as well as other data, from large numbers of servers and switches using the SNMP protocol
- Wrote Python code for an oracle linux environment with a MariaDB database

# Student Team Lead

Lambda School

- Supported students in 1-on-1 sessions and hosted stand-up meetings several times a week
- Reviewed code for and mentored a group of 6 students
- Provided tutoring on Python, pandas, statistics and linear algebra

# **Consultant Developer**

Edward Jones, St. Louis, MO (through FDM Group, Inc.)

- Redesigned the internal bug reporting web page to file tickets to the relevant project
- Completed a 3 month intensive training program in Java development

# **Software Engineer**

WordStream Inc, Boston, MA

- Performed Python development in in a CherryPy/webapp2 framework utilizing Facebook's marketing API; investigated new FacebookAds releases and tracked known bugs
- Created a weekly adoption report script to gather usage statistics and send them to the product team
- Used JavaScript with knockout.js and Bootstrap to create reusable UI components such as grids, animated graphs, and modal dialogues
- Worked on Wordstream's Facebook Advertising SaaS product

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December 2020-present

January 2020-December 2020

January 2019-September 2019

April 2015-February 2017

# Software Engineering Intern

Symantec Corporation, Waltham, MA

- Merged the Norton Online Family and Norton Safety Minder Android apps
- In JavaScript and Java with an Apache Maven build, updated the Norton Online Family .jsp website to comply with API changes
- Used Splunk to visualize call times to help identify performance issues

## I.T. Assistant

Submillimeter-Wave Technology Lab at UMass Lowell, Lowell, MA

- Created python scripts to automate database maintenance tasks and webpage updates
- Troubleshooted on Windows and Mac computers

## **UNIVERSITY PROJECTS**

## Google AI Challenge 2011

- Programmed a bot in Python with A\* Search and Markov Decision Processes to play the strategy game Ants
- In the AI Challenge Tournament, the bot ranked in the top 10% out of approximately 7900 other bots from around the world

## **Robotics I Egghunt**

• Built and programmed a lego robot to collect plastic eggs of a certain color and deposit them into a goal zone

## **Robotics I Final**

• Programmed a robot in C to track floor tile patterns to navigate along a hall between rooms

## **Robotics II Midterm Project**

• Implemented a Particle Filter in Python for a robot equipped only with distance sensors to localize in a premapped hallway, using ROS for IO and control

## **Robotics II Final Project**

• Programmed a Bilibot robot using ROS and Python to track humans with a Kinect sensor and shoot at them with a Nerf blaster

# **EDUCATION**

## Lambda School

Data Science

## University of Massachusetts Lowell, Lowell, Massachusetts

Bachelor of Science in Computer Science (Minor: Robotics)

December 2014 GPA: 3.4

*June 2011-August 2011*