

Owen Q. Brooks

<http://owen-brooks.github.io>

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EDUCATION

- Drexel University** Philadelphia, PA
 - Bachelor of Science in Computer Engineering; GPA: 3.5* *Sept 2016 - June 2020*

EXPERIENCE

- Bloomberg L.P.** Princeton, NJ
 - Data Engineer* *July 2020 - Present*
- CRED iQ** Radnor, PA
 - Jr. Software Developer* *Dec 2019 - July 2020*
 - Web Scraping:** Automated the collection of commercial real estate data by building python web crawlers. Wrote tools to parse and normalize data from collected documents. Deployed and scheduled crawlers using AWS.
 - CMBS Analytics Application:** Contributed to development of full-stack application for analysis of commercial mortgage-backed securities. Created various data visualizations of commercial property data.
 - CMBS Loan File Normalization:** Automated the normalization of CMBS loan annex files using data cleaning and clustering methods.
 - Comps Model:** Developed model to determine comparable properties using a weighting of different factors.
- Bloomberg L.P.** Princeton, NJ
 - Data Engineering Co-op* *May 2019 - September 2019*
 - Portfolio Data Migration:** Improved portfolio data quality by developing a data pipeline that featured enrichment, error detection, and crowd-sourced error remediation. Interfaced with various micro-services and API's to load data into new format.
 - Random Sampling Library:** Standardized calculations of precision and recall in data quality projects by developing a Python package for random sampling. Worked with various data teams to build out new features and assist in implementation.
 - Company Segments Data Quality:** Automated data quality checks on company segment data by designing and building Python application. Interfaced with cloud and NoSQL databases to enrich and validate data. Built out error correction pipeline using micro-services and JIRA project management software.
- Comcast** West Chester, PA
 - Software Engineering Co-op* *May 2018 - September 2018*
 - Workflow Dashboard:** Designed and built full-stack Spring-Boot application allowing users to monitor data-transfer workflows. Leveraged 3rd party Java API to safely interact with automation software. Focused on scalable design to allow easier on-boarding of users.
 - Workflow Control API:** Simplified access to backend database by creating a REST API using Spring-Boot and JPA. Researched and implemented continuous deployment using Jenkins and Cloud-Foundry. Leveraged Spring Rest Docs to auto-generate scalable API documentation.
 - Metadata Search App:** Increased data accessibility by developing a full-stack metadata-search application. Reformatted Elasticsearch database in order to improve query time and application scalability.

PROJECTS

- XAI Senior Project:** Academic paper comparing the effectiveness of eXplainable AI methods on neural nets. Involved detailed project planning and various presentations on team progress. (Python, Tensorflow, Keras)
- UFC Fight Predictor:** Various models to predict the outcome of UFC fights. Features cost-sensitive learning techniques to account for betting odds. (Python, Pandas, Tensorflow)
- Project Connect:** Web application that matches students with programming projects. (NodeJS, MySQL)
- Owen-brooks.github.io:** Personal website and blog with articles on work experience and programming. (Jekyll)

SELECT SKILLS

- Languages:** (proficient): Python, Java, JavaScript, SQL, Bash, MATLAB (familiar): TypeScript, R, C++,
- Frameworks and Tools:** Bloomberg Terminal, Git, Jenkins, JIRA, Pandas, Spring-Boot, NodeJS, React, Flask, Oracle, AWS, MySQL

EXTRACURRICULAR ACTIVITIES

- Drexel Men's Wrestling:** Team member and starter on nationally ranked Division I wrestling team. (2016 - 2020)