

## Isaac McKillen-Godfried

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### Experiences

**Data Engineer** Hudson Bay Company January 2019 to present

- Developed and optimized machine learning pipelines to forecast in-store retail demand with SparkMLlib
- Researched NLP techniques in PyTorch/Tensorflow to improve product categorization and personalization
- Regularly wrote SparkSQL and utilized Zeppelin notebooks on AWS EMR to perform EDA on large datasets.
- Developed Airflow DAGs to run Spark jobs on AWS EMR clusters in order to automate ETL processes

**Data Analyst** Eastern Maine Medical Center, Bangor ME Jul-2017 - Jun 2018  
Jun-2016 to Jan-2017

- Refactored and implemented RNNs in Keras/Tensorflow to forecast patient length of stay and researched few-shot detection of conditions in Chest X-Rays with RetinaNet and YOLO2.
- Built ETL pipelines in Python to extract, transform, and load data from SQL databases, CSV files, and APIs.

**Founder** PaddleSoft, Bangor ME Jun-2015 to Jun-2017

- Created a neural network (NARX) in MATLAB to predict the flow of the Kenduskeag stream.
- Employed big data technologies like Spark and Hadoop (in both Java and Python) to perform distributed analysis and train NLP algorithms like Word2Vec and LDA on textual datasets.
- Built realtime streaming systems and dashboards with Avro, Kafka, Flink and D3.js

**IT Intern** Eastern Maine Health Services, Brewer ME May-2014 to Aug-2014

**Research Assistant** University of Maine, Orono ME Jun-2012 to Aug-2013

### Other Accomplishments

**Developed a chatbot from scratch** using the Slack-API, Flask, Redis, PostgreSQL, ElasticSearch, and Spacy. Slowly added more advanced deep learning models with Tensorflow to improve conversational ability.

**Author in Towards Data Science-** Wrote multiple stories summarizing recent advances in deep learning research as well as tutorials on deploying deep learning models at scale.

**Kaggle Competitions Expert-** ranked in the top 5% of all data scientists on Kaggle. Earned bronze medals in both the Allen AI Challenge (using AI to solve multiple choice questions) and the 2017 Data Science Bowl.

### Skills

- **Languages:** Python, Java, SQL, JavaScript, Scheme, and Scala.
- **Technologies:** Tensorflow, PyTorch, Pandas, scikit-learn, Flink, Kafka, Airflow, and ElasticSearch.
- **Tools:** AWS, Google Cloud, Docker, Kubernetes, Git, Travis-CI, Codecov, and Codefresh.

### Education

B.A. Hispanic Studies Brandeis University, Waltham MA Aug-2013 to May-2017

Minors in Computer Science and Near Eastern and Judaic Studies