NICK OUELLET

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Data Scientist and Developer building data and modelling tooling and web frontends.

EXPERIENCE

Manager of Data Science: Travelers - Claim AI   **March 2021 – Present**
- Develop prediction platform utilizing ElasticSearch backend with React frontend deployed in AWS with Docker for productionalizing and monitoring a deep learning system
- Manage exploration of techniques to model on extremely long sequences of text in supervised and unsupervised fashions
- Make tooling for deep learning vision and language model unsupervised creation and evaluation
- Construct a modelling pipeline to pull from a tiled image API with geocoding and spatial manipulation for aerial imagery EDA and robust model creation

Associate Data Science Researcher: Travelers - Claim AI   **April 2020 – March 2021**
- Created data-driven deep learning models to solve vision and nlp problems of Travelers claims including chatbots, catastrophy detection, policy verification and segmentation
- Integrated the inherently exploratory data science workflow into a CI/CD development cycle
- Managed an intern to develop a model refresh and enhancement based on integrating unstructured text features and multiclass model consolidation
- Built a tool to extract and parse text data from Hadoop creating tokens for downstream modelling

Senior Data Science Consultant: Travelers - Claim Research   **April 2019 – April 2020**
- Performed EDA and software development to facilitate productionalization of predictive models
- Deployed the first claim realtime model in a container environment founding best practices for production code architecture, realtime model APIs and operational reporting data storage and retrieval
- Monitored production models to ensure consistency of operation
- Created a prototype platform to aggregate social media sentiment analysis about the company
- Trained a deep learning vision model which won an enterprise-level national competition by Gartner
- Developed a fetching tool to facilitate extracting table metadata and running queries against primary databases

Data Science Consultant: Travelers - Claim Research   **October 2017 – April 2019**
- Designed and test Python machine learning models implemented using the Model as a Service (MaaS) delivery framework for real-time cloud-hosted integration into current business workflow
- Used advanced tools and platforms, including Spark, Python, and SAS, to perform exploratory data analysis to determine business viability
- Led classes of 15+ participants to teach software development best practices with respect to machine learning modelling development and testing

PUBLIC COMPANY PROJECTS

Travelers Wildfire Detection Model   **November 2018 – April 2019**
- Trained a vision model to identify homes affected by wildfires from aerial imagery
- Developed a pipeline to train models on other catastrophe aerial imagery

EDUCATION

University of Connecticut   **September 2016 – June 2017**
- Master of Science in Mathematics
- GPA: 4.16/4.00

Brandeis University   **September 2012 – December 2015**
- Bachelor of Arts, magna cum laude, Mathematics with honors
- Minors: Computer Science, Economics
- GPA: 3.72/4.00, Dean's List all semesters

SKILLS
- Web development: HTML, CSS (SCSS), JavaScript, React, NodeJS, Express, Graphql, Apollo, Flask,

- Machine Learning and Data Science: Python, Pandas, Scikit-Learn, Pytorch, XGBoost, SQL, PySpark, SAS
- General: Rust, Lua, Docker, AWS, MongoDB, ElasticSearch, Neo4J (w/ Neo4JGraphql), Git, Github (+ Actions), Shell (Bash + common tools), Make