Mitchell Falkow

(201) 921-4874 | mdfalkow@gmail.com | www.mdfalkow.com | mdfalkow | Ramsey, NJ

Education

Rensselaer Polytechnic Institute *Troy, NY*
MS IN COMPUTER SCIENCE, BS IN COMPUTER SCIENCE & MATHEMATICS *2017 – 2021*
- GPA: 3.79
- Concentrations in Artificial Intelligence and Data Science
- Relevant Coursework: Machine Learning, Natural Language Processing, Data Mathematics, Computational Optimization, Graph Theory

Work Experience

Royal Bank of Canada *Jersey City, NJ*
AMPLIFY SUMMER ANALYST - DATA SCIENTIST *Jun 2020 – Present*
- Designing a comprehensive solution for enhancing the quality of incident resolution data and increasing support team efficiency
- Developing a microservice architecture for recommending potention resolutions by leveraging technologies such as voice transcription, keyword extraction, and intent classification
- Implementing a Python (Flask) microservice which utilizes NLP techniques like keyword extraction and intent classification in order to retrieve related incidents' solutions from an Elasticsearch database containing incident information

Royal Bank of Canada *Jersey City, NJ*
TECHNOLOGY INFRASTRUCTURE INTERN *Jun 2019 – Aug 2019*
- Designed a web application for monitoring internal RBC services' status in real-time, and streamlining the process of identifying the causes of service outages in a complex service ecosystem
- Implemented with full-stack technologies, including React.js frontend, Java (Spring Boot) REST API backend, and MySQL
- Co-ran an internal workshop providing an introduction to machine learning and data analysis

The MITRE Corporation *Bedford, MA*
SOFTWARE ENGINEERING INTERN *May 2018 – Aug 2018*
- Prototyped a DevOps dashboard for visualizing security requirements for U.S. Airforce software development teams
- Developed two Java (Spring Boot) microservices and a Vue.js web-client in a multi-repository microservice architecture

Research Experience

Tetherless World Constellation *Troy, NY*
GRADUATE RESEARCHER *Jan 2020 – Present*
- Exploring the use of domain-specific knowledge graph entities for building OWL structures that represent attribute-based policies
- Developing a domain-agnostic policy tool in support of Master's thesis (hansidm/policy-tool)

Technical Skills

Languages:	Python, JavaScript, Java, SQL, NoSQL (Elasticsearch, MongoDB)
Python Modules:	NumPy, SciPy, scikit-learn, pandas, Flask, Keras/Tensorflow, rdflib
JavaScript Frameworks:	React.js, Material-UI, Node.js, Express.js, Vue
Java Frameworks:	Spring Boot, Hibernate, Lombok

Extracurriculars

coding&&community *Troy, NY*
VOLUNTEER INSTRUCTOR *Sep 2018 – Present*
- Leading weekly introductory Python, Arduino, and web development lessons for local 6th-9th graders
- Volunteering for multiple outreach programs throughout year, including hackathon-style events

Shorin-ryu Shidokan Karate *Mahwah, NJ*
3RD DEGREE BLACKBELT, VOLUNTEER INSTRUCTOR *Jan 2008 – Present*
- Instructing traditional Okinawan karate classes for children and adults