# Miraj Patel

New York, NY | (917)-723-0698 | mirage.patel@gmail.com | https://github.com/mirajp

## EXPERIENCE

#### **Highbridge Capital Management**, NYC - Software Engineer

May 2017 - Present

- Architected a real-time trade processing system using Apache Kafka (message queue) on distributed systems for fault tolerance and disaster recovery
- Architected microservices for regulation-mandated trade reporting and optimization of treasury analysts' daily workflows
- Developed web apps with intuitive event-driven Angular and Vue.js frontends for various stakeholders including traders, internal developers, and managing directors
- Developed developer-oriented RESTful API (Swagger/OpenAPI specification-compliant) for trade manipulation in order to reduce manual entry/checks at end-of-day
- Designed a more modern UI/UX of legacy web applications to establish internal starter kit with standardized company theme and lightweight authentication and authorization backend service
- Configured Jenkins jobs for automated builds, Maven deployment, and releases into QA and Production environments
- Optimized ETL procedures on SQL Server; reduced the runtime of audit-related backups by ~67%

#### **Consolidated Edison**, NYC - Engineering Aide (Intern)

May 2015 – August 2016

- Developed a dashboard on Google Maps to that allows management to prioritize Manhattan's electric network repair in accordance with urgency and customer impact
- Rectified over 20% customer data using NYC Open Data and Google Maps Web Services APIs
- Developed VBScript and Excel-related productivity tools to reduce manual effort and time required for data entry and analysis by over 50%
- Redesigned department's SharePoint site, document libraries, online forms, and Nintex workflows

#### TECHNICAL PROJECTS

# **Detection of Maliciously Authored News Articles**

January – December 2017

- Scraped credible news articles indexed by Google News, and fake news articles listed on Snopes
- Appended dataset with features like article metadata, document analytics, and sentiment-related features available through natural language processing APIs on Google Cloud and Microsoft Azure
- Trained and tuned performant Scikit-learn KNN and SVM classifiers
- Developed a high-performance Keras LSTM (recurrent neural network) classifier to reach 90% overall accuracy and average F1-score

Movie Role Finder October - December 2016

- Developed React frontend with a Node.js RESTful backend to display interesting factoids and connections between popular movies, directors, and actors
- Populated MySQL database with 50,000+ actors, 2,000+ directors, and 4,000+ movies of 23 genres
- Designed personality quiz to cast application users into movie roles

## **EDUCATION - Cooper Union, NYC**

**Master of Engineering**, *Electrical Engineering* (GPA: 3.8/4.0) **Bachelor of Engineering**, *Computer Engineering* (GPA: 3.3/4.0)

December 2017 May 2016

#### SKILLS

- Proficient in C, C++, Java, JavaScript, MATLAB, Python, VBA, VBScript, HTML/CSS and Sass
- Working knowledge of Angular, React, Vue.js frontends and Node.js and Spring backends
- Experience with data science, machine learning, and natural language processing using Python (Keras, NLTK, NumPy, Scikit-learn)