

# Nariman Alimuradov . Jarvis Consulting

I am a graduate of McMaster University's software engineering program, and I have recently joined Jarvis as a software and data engineer. During my undergrad, I spent eight months as a software developer for Adlib Software, where I designed document detection models on the machine learning team. I enjoy spending my free time volunteering. While at McMaster, I spent a year teaching workshop classes to students at elementary schools across Hamilton. I have also been volunteering over the past six months as a crisis responder for the Kids Help Phone text line. I love programming and computer science because it is a language that can be applied to every facet of life. Software provides immeasurable benefits to everything in our lives, and it's critical to have a deep understanding of it.

## Skills

**Proficient:** Java, Python, SQL, JavaScript, Git, Agile/Scrum

**Competent:** Docker, Linux/Bash, HTML/CSS, Flask, Keras

**Familiar:** React, Node.js, AWS, Android, REST API

## Jarvis Projects

Project source code: [https://github.com/jarviscanada/jarvis\\_data\\_eng\\_NarimanAlimuradov](https://github.com/jarviscanada/jarvis_data_eng_NarimanAlimuradov)

**Cluster Monitor** [GitHub]: Developed a Linux monitoring agent that allows a user to monitor and store machine specifications and usage information for multiple Linux systems. The agent employs Bash Scripts to collect machine hardware information, which is then stored in a PostgreSQL database provisioned using Docker. Resource usage is fetched periodically with Crontab, and the aggregated data can then be manipulated using SQL queries.

**Core Java Apps** [GitHub]:

- **Twitter App:** Built a Twitter CLI that provides a way to use Twitter through the command line. The application allows for the posting of new Tweets, fetching already created Tweets, as well as deleting Tweets. Made in Java with the user of the Twitter REST API. Implemented with a DAO design pattern and structured using Maven and Springboot. Packaged with Docker.
- **JDBC App:** Implemented a JDBC app that connects Java to a PostgreSQL database. Built using the Data Access Object (DAO) pattern and tested on generated SQL sales data. Made in Java with the Maven project management tool.
- **Grep App:** Deployed a Java application that can search through files in a folder and filter the content based on a regular expression, similar to the GREP command in Linux. Created using the Maven project management tool and utilizes Java 8 streams for memory efficiency. Packaged using Docker and available on DockerHub.

**Springboot App** [GitHub]: Created a proof-of-concept Java stock trading REST API that aims to modernize Jarvis' previous platform through a microservice design. Allows users to manage trading accounts, as well as get and post IEX quote data. Designed using the Spring framework and packaged using Maven. Database connection support provided by JDBC and deployed as web servlet with the help of SwaggerUI and Apache Tomcat. Available on DockerHub.

**Python Data Analytics** [GitHub]: Analyzed Jarvis' client's (London Gift Shop's) retail data to determine the causes of their recent decline in sales. Employed statistical techniques to establish solutions for retaining old customers, as well as attracting new ones. Analyses performed in Python and saved in a Jupyter notebook. Used Pandas, NumPy, and Matplotlib for data wrangling and visualization. Stored client data in a data warehouse using PostgreSQL.

**Hadoop** [GitHub]: Currently in progress!

## Highlighted Projects

**Subreddit Recommender** [GitHub]: Built and cloud-hosted a Python recommendation model that uses the Reddit API to suggest new subreddits (online communities) to the user based on the subreddits they like. Reddit user activity is periodically aggregated to optimize and update the recommendations over time. Deployed using Flask and Heroku. Try it out at <https://subreddits.nalimuradov.com>.

**YouTube Thumbnail Evaluator** [GitHub]: Developed a Python machine learning application that estimates the viewership success of a YouTube video by analyzing the video title and thumbnail. NLTK and natural language processing heuristics are used to evaluate the video title, and Keras image recognition models are used to evaluate the thumbnail. Training data was web-scraped and fetched using the YouTube API. Deployed using Flask at <https://thumbnail.nalimuradov.com>.

**Pokemon Team Generator** [GitHub]: Created a React web application that generates the user a team of six Pokemon based on their filters and criteria. All assets stored externally and fetched at runtime when required to allow for a lightweight design. Written in JavaScript, HTML, CSS. Deployed with the help of Heroku, Github, and Node.js. Available at <https://pokemon.nalimuradov.com>.

## Professional Experiences

**Data Engineer, Jarvis (2020-present)**: Collaborated in a Scrum team within an Agile environment as a data engineer. Implemented software projects using a variety of technologies such as Linux, Java, SQL, Docker, Git, and GCP to familiarize with current industry trends.

**Software Developer, Adlib Software (2019)**: Worked as a software developer in an Agile environment on the machine learning team. Created an object detection neural net that locates signatures and handwriting on documents using Python and Keras, allowing clients to automatically validate their files within seconds. Implemented Python automation tools for testing NLP model accuracy. Integrated a C# speech-to-text model for client audio file conversion and meeting transcription.

## Education

**McMaster University (2015-2020)**, Bachelor of Engineering, Software Engineering - GPA 3.2/4.0

## Miscellaneous

- Volunteer, Workshop Teacher @ McMaster's Children and Youth University (2018-2019): Designed and taught a tech workshop class to students at elementary schools across Hamilton.
- Volunteer, Crisis Text Responder @ Kids Help Phone (2020-Present): Provided confidential support and further resources for young texters in distress.