Jatin Dholakia

Portfolio: jatin.work
Github: github.com/JatinDholakia

Email: dholakia98@gmail.com
Mobile: +91-9825220302
Linkedin: jatin-dholakia

Education

- **Indian Institute of Technology, Gandhinagar** — GPA: 8.24
  B.Tech - Electrical Engineering with Minor in Computer Science — *2016 - 2020*
- **Shiv Jyoti Convent School** — 91.8 %
  12th CBSE | PCM — *2015 - 2016*
- **Nand Vidya Niketan** — CGPA: 10.0
  10th CBSE — *2013-2014*

Skills

- **Languages**: Java, SQL, Python, C++, JavaScript
- **Frameworks**: Spring, ReactJS, Flask, PyTorch, Tensorflow
- **Tools**: Docker, GIT, MySQL, PostgreSQL
- **Miscellaneous**: AWS, Google Cloud Platform, Agile framework, Microservices

Experience

- **S&P Global**
  Software Development Engineer — *August 2020 - Present*
  - Worked on an internal tool which is used to entitle packages to users. It is built using Spring framework and uses MVC architecture.
  - Added new feed of data into the tool which increased the packages offered.
- **Quantiphi Analytics**
  Platform Engineering Intern — *May 2019 - July 2019*
  - Built a data-pipeline for a retail company to forecast its sales based on past data, using Google Cloud Platform. Learnt to use GCP services like BigQuery, AppEngine, Endpoints, AutoML, Cloud Composer etc
  - Orchestrated various pre-processing and post-processing tasks into the pipeline using Cloud Composer which runs on a Kubernetes cluster.
  - Built a backend web-application using **Flask**, which served the API calls made by the user.
  - Created an endpoint which would perform **user authentication** using the credentials provided.
  - Used AutoML Tables to generate predictions on back test splits and evaluate metrics.

Projects

- **SentEmoji - Empathetic Conversation Generation**: Github
  - Published in 25th COMAD (CODS-COMAD 2020) - International Conference on Data Science and Management of Data.
  - Developed a chatbot that generated empathetic **responses with emojis** to the given context
  - Used architectures like Transformer encoder and BERT. Used word2vec and emoji2vec to assign emojis to sentences and CNN model to identify the emotion of generated sentence.
- **Real Word Spelling Correction**: Demo Github Article
  - Correction of sentence based on context, even if an out-of-dictionary word is not present. Bigram language model is used to compute probabilities of all candidate sentences using a metric like edit distance.
  - Used **AWS Lambda** and **API Gateway** to deploy as a API. Created a form for taking input and making requests.
- **Reinforcement Learning for Games**: Github
  - Explored the performance of algorithms like Q-Learning, Deep Q-Learning and CNN based Deep Q-Learning on games with varying number of states.
  - Understood the tradeoff between exploration and exploitation in large MDPs. Trained agent using epsilon-greedy policy.
  - Achieved an average score of 1200 on the classic game Pacman, which was close to the human-level performance of 1500.
- **LarsLasso Regression Visualizer**:

Achievements

- **Dean's list** award for excellent academic performance in Semester 6 & 7
- Qualified for second round of Jumpstart (Hackathon), from over **1400 participants**.
- Rated **Specialist** on Codeforces - a Competitive Programming Website
- Secured a rank of **2548** (ranked in top 0.2% of candidates) in **JEE Advanced (IIT-JEE)**
- Awarded **Certificate of Merit** (by CBSE) for obtaining 'A1' grade in all the 5 subjects in 10th standard.