

## EDUCATION

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- **Indian Institute of Technology, Gandhinagar** CGPA: 8.24  
*B.Tech - Electrical Engineering with Minor in Computer Science* 2016 - 2020

## EXPERIENCE

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- **Enphase Energy** *July 2022 - Present*  
*Senior Software Engineer*
  - Designed and lead the development for a **Notification Service**. Used asynchronous messaging (using SQS) between API servers and notification service. The notifications are filtered based on user preferences. Implemented for Email and in-app notifications. Handled on-click by sending redirect link in JSON payload.
  - Improved performance of the most used API (~15 rps) of the team. P95 latency reduced from 800 ms to 200 ms. This was done by introducing a caching layer for RBAC list and improving API logic to remove redundant queries.
  - Implemented a protocol (OpenADR) that uses **mutual TLS** for authentication in a server to server communication.
- *Software Engineer* *April 2021 - June 2022*
  - Designed and implemented **Dynamic Form** that stored meta information about a program's form. The form's properties such as field type, validations, ordering, default value etc. can be configured by admin. This reduced the onboarding time for new partners.
  - Implemented **Scheduler Locking** to restrict cron jobs to execute only in one node. This is achieved by having a shared database across worker nodes so that lock is acquired by exactly one of them.
  - Implemented sorting, filtering and pagination in REST APIs used by frontend.
- **S&P Global** *August 2020 - March 2021*  
*Software Development Engineer*
  - 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.
  - Worked on API drive link which runs a scheduler on input files, calls API and places output file in client's outbox folder.
- **Quantiphi Analytics** *May 2019 - July 2019*  
*Platform Engineering Intern*
  - Built a data-pipeline for a retail company to forecast its sales based on past data, using Google Cloud Platform.
  - Orchestrated various pre-processing and post-processing tasks into the pipeline using Cloud Composer which runs on a Kubernetes cluster.
  - Used AutoML Tables to generate predictions on back test splits and evaluate metrics.

## PROJECTS

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- **SentEmoji - Empathetic Conversation Generation:** [Github](#)
  - Published in [25<sup>th</sup> 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.
- **Recipes** [Github](#)
  - Multi-user web service with Spring Boot that allows storing, retrieving, updating and deleting recipes.
  - Built using Spring Boot, Spring Security, Spring Data JPA and uses MySQL database.
- **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 an API. Created a form for taking input and making requests.

## PROGRAMMING SKILLS

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- **Languages:** Java, C++, Python
- **Technologies:** AWS, Spring, MongoDB, Redis, Kubernetes, Git