DEEPEN PATEL

A self-motivated and goal-driven student who thrives on collaboration and is passionate about expanding technical knowledge into new areas and loves to solve real-world problems and build innovative software products.

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EDUCATION

San Jose State UniversityMaster of Science, Software EngineeringExpected December 2021Gujarat Technological UniversityBachelor of Engineering, Computer EngineeringAugust 2015 - May 2019

SKILLS

Programming Languages: Python, Java, JavaScript, C, C++, Golang, Swift (In Progress)

Back-end development: Node.js, Express.js, Passport.js, JWT, GraphQL, Apache Kafka, RESTful Systems, Django, Spring framework

Front-end development: React, Redux, HTML5, CSS, Bootstrap, JQuery

Database: SQL (MySQL, Microsoft SQL server), NoSQL (MongoDB, Redis)
Cloud technologies: Amazon Web Services (EC2, RDS, S3, Security Groups), Docker

Continuous integration: Source control (Git), Automation unit and integration testing (JUnit, Mocha), Application load testing

(JMeter), Jenkins (In progress)

Data Science: NumPy, sklearn, pandas, Matplotlib, TensorFlow (In Progress), Keras (In Progress), Hadoop

Other: Windows, MacOS, Unix/Linux Platform, Object oriented design, Agile software development, Problem

solving, Software development lifecycle, Test driven development

Coursework: Algorithms and Data structures, Database management Systems, Operating Systems, Web Applications

development, Computer Networks, Machine Learning, Big data Analytics, Large scale distributed

systems, Software Systems Engineering, Data mining, Software Security

Certifications: Jenkins Essential Training - LinkedIn Learning (In progress)

Professional iOS development - Codepath.org (In progress)

WORK EXPERIENCE

Pratham Notebook
Software Developer Intern

Ahmedabad, India

June 2019 – November 2019

- Developed management systems and branded website for a Consumer goods startup in a team-based environment.
- Designed database to keep track of sales for analysis and improvement, resulting in 15% sales growth.
- Implemented backend micro-services in Node.js to gain high performance and handle concurrent connections.
- Developed intuitive and responsive front-end elements with reusable components and scalable framework (React).

PROJECTS

Amazon Prototype (MERN Stack, Redux, Apache Kafka, MySQL, Redis, Passport.js, JWT)

April 2020 – May 2020

- Led the development of a secure e-commerce web app similar to amazon.com with 10000 products in a team of five members.
- Designed the scalable software system architecture consisting of client layer, message queuing system and database layer.
- Implemented token-based authentication and authorization, tested performance using JMeter and wrote test cases.
- Set up Apache Kafka cluster as a messaging queue to decouple APIs and business logic resulting in 20% rise in efficiency.
- Deployed on AWS EC2 instance with auto-scaling, security groups and load balancer for high availability.

Handshake Prototype - simulation of joinhandshake.com (MERN Stack, Database pooling, Socket.io)

April 2020

- Developed a scalable, interactive and robust full stack application, where students can apply to job postings, register for eligible events posted by companies, look at other students' profiles and communicate with them via real-time messages.
- Used connection pooling which helped increase the response rate of server and tested using Postman.
- Hosted on Amazon AWS cloud and developed following the SCRUM methodology for software development.

Traffic Governance System (Python, YOLOv3, OpenCV, Flask, HTML, CSS, Docker)

March 2020

- Built an AI system that deals with the flow of traffic at crossroads in urban areas.
- The system takes a video of lanes as an input, detects the vehicles and calculates the number of vehicles in each lane using YOLOv3.
- Then, it sets the timer for that lane and balances the timer for other lanes accordingly.

Credit Card Detection (Java, JUnit)

April 2020

- Built an application for verification and classification of Credit cards from different file formats (.CSV, .JSON, .XML) in java.
- Followed Gang of Four Design Patterns and principles (Strategy and Chain of responsibility) to define the structure of the application.

Sentiment Analysis of Twitter Data (Hadoop, HDFS, Flume, Hive)

March 2019 - April 2019

- Built a system to perform sentiment analysis on social media data. Stored live tweets using Twitter-API on any topic in HDFS.
- To simplify further tasks, got rid of unnecessary data using Hive.
- Finally divided all of them into 3 groups, based on their polarity which is positive, negative or neutral.