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AMAN M. DAVE

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SUMMARY

- **Full-Stack developer** with experience building complex production-ready applications that are **fast, scalable**, and **reliable**. I read about underline backend architecture in my free time and maintain notes here.
- Highly skilled in **Data Structures and Algorithms**, with an ability to work in a fast-paced environment, to understand complex systems, and to quickly learn and adapt to emerging technologies and paradigms.

TECHNICAL SKILLS

- **Languages**: C, C++, Java, Javascript, Python, SQL, HTML, CSS.
- **Tools and Frameworks**: ReactJS, Node.js, AWS Suite, MySQL, Serverless, GraphQL, Gatsby Cypress.

WORK EXPERIENCE

Student Developer *[ReactJS, Node.js, PostgreSQL, Python]*   ***Google Summer of Code***   May 2019 – Aug 2019 (Project Link)

- Developed a web-based solution to simulate and analyze constraint-based methods for metabolic networks under the **University of Nebraska-Lincoln.**
- Designed a stand-alone **web pipeline/service** that enables a user to submit an **SBML** model and perform **simulations** and **analysis** and displays an analysis graph accordingly.
- Defined and implemented a **complex database schema** for a **constrained-based Model** that can be tabulated within a PostgreSQL Database. The schema was easily **JSON serializable** so that it was exposed via a **REST API**.
- The UI contained end-to-end written using **cypress.io.**

Full-Stack Developer *[ReactJS, Java, Node.js, MySQL, AWS]*   ***Quze Inc.***   May 2018 – Apr 2020

- Core technical team member focusing on building core application and deploying it on AWS.
- Implemented REST APIs deployed on **AWS API gateway** using **AWS lambda** for serverless setup.
- Incharge of capturing user activity data, analyzing events and generating reports to understand user behavior.
- Lead the efforts to switch the backend from **Java to Node.js** and followed the microservice architecture.
- Developed an **API generator tool** in JAVA that reduced the time of building APIs by **at least 40%**.

Web Developer *[HTML, CSS]*   ***Ahmedabad University***   Oct 2018 – Dec 2019

- Designed, developed and deployed the Annual Tech Fest website for School of engineering and applied Science, Ahmedabad University. More than 3000 students participated in various competitions.
- Technical team leader to design and develop the website for The Seventh International Conference on Big Data Analytics, where Springer will be publishing the accepted research papers. (Project Link)

EDUCATION

Ahmedabad University   **Information and Communication Technology**   **July 2017 – June 2021**

- **Coursework**: Operating Systems; Database Management Systems; Data Structures and Algorithms.

ADDITIONAL PROJECTS

BooXchange [BooXchange]   *(ReactJS, Node.js, MongoDB)*

- A platform where students can buy or rent their books. Deployed using **Heroku CI/CD**
- Developed **CRUD APIs** using **Node.js** and designed UI which was implemented using **ReactJS**
- Implemented an **Admin Panel** which shows all the history of books bought, rented, added and deleted

SVG Renderer [ccNetViz]   *(JavaScript)*

- Designed an SVG rendering plugin that allows users to download **large-scale vector images** for the ccNetViz library, a lightweight javascript library to visualize large network graphs
- Used various techniques for **lazy caching** of different drawing elements to gain high-performance

Travel Planner [Database Management Systems] [GitHub]   *(HTML, PHP, MySQL)*

- Designed the UI using HTML, CSS and PHP to handle events and take user inputs
- Implemented **Stored Procedures** and Functions to help book various tickets for traveling

Multi-Threading CPU [Data Structure and Algorithms]   *(Java)*

- Developed a Java application that replicated the multi-threading process depending upon user inputs

ADDITIONAL EXPERIENCE AND AWARDS

- **IEEE Xtreme 2017:** National Rank 124, a 24-hour coding competition.
- **Google Hash Code 2020:** National Rank 226, (more than 3100+ teams from India)
- **Web-Development Series:** Conducted a 4 lecture series on web dev topics with more than 100 participants