Nisarg Prajapati

Raleigh, NC | nprajap@ncsu.edu | linkedin.com/in/nisargprajapati210 | github.com/nisarg210|+1 (919)-593-6543

Education

North Carolina State University	Aug 2023 – May 2025

Master of Computer Science — GPA: 4/4

Coursework: Automated Learning & Data Analysis , Software Engineering, Design and Analysis of Algorithms, Neural Networks

Dharmsinh Desai University	July 2019 – May 2023

Bachelor of Technology in Computer Engineering — GPA: 8.93/10

Coursework: Database Management System, Object-Oriented Programming, Operating System, Computer Networks

Experience

Research Intern, **Indian Space Research Organization (ISRO)**, Ahmedabad, India — Dec 2022 – April 2023

- Engineered a scalable and responsive architecture for a data collection web application to streamline data collection for various departments and eliminate redundant tasks for the IT department, reducing manual effort by 30%.
- Developed a role-based access control system with JWT and OAuth 2.0, ensuring data privacy, security, and controlled data access for employees.
- Developed robust data validation and cleansing mechanisms, reducing data entry errors by 30% and maintaining data integrity through the use of RESTful APIs and server-side validation.
- Employed performance optimization techniques, such as lazy loading and asynchronous data retrieval, resulting in a 40% reduction in page load times and improved overall application responsiveness
- Managed the project using Agile methodologies, conducting regular sprint reviews and retrospectives, which led to the timely delivery of features and a 20% reduction in development time.
- Achieved security and integrity by migrating an unsecured web app to a secured web application through integration with the existing Apereo CAS SSO.
- Integrated an email notification system utilizing the organization's existing SMTP server to send real-time event notifications to users, enhancing communication and streamlining workflow processes.
- Dockerized web application to improve scalability and deployment efficiency. Responsibilities included containerizing application environments, ensuring cross-stage integration, and compatibility. Skills utilized: Docker, container orchestration, software deployment.
- Technologies: React.Js, Node.Js, Apereo CAS, Express.Js, MongoDB

Software Development Intern, **CodeSchema Solutions**, Ahmedabad, India — May 2022 – Aug 2022

- Optimized backend APIs by applying response compression and handled SQL caching to reduce database costs by 40%.
- Migrated the existing API to a different service, performed API testing, and deprecated the old service,
- Wrote efficient aggregation pipelines using Mongoose.

Software Development Intern, **AshTech Softwares**, Surat, India — May 2021 – Aug 2021

- Leveraged React.js with Webpack for code splitting and tree shaking, resulting in a 40% faster page load and enhanced user experience.
- Achieved a 30% reduction in response times by fine-tuning database indexes and implementing MongoDB Atlas.

Skills

Languages/Database/Technologies: C, C++, C#, Java, Python, PHP, Javascript, Typescript, HTML, CSS, MongoDb, MS Sql, MySQL, AWS DynamoDb, Postgresql, React.Js, Redux, Django, Flask, ASP.Net, .Net Core, AWS EC2, AWS S3, Mongo Shell, Socket.io, AWS, Git, Linux, Docker, Jenkins, Laravel, CI/CD, NoSQL, Express.Js, Nest.Js, Next.Js, Tableau, Keras, Tensorflow, Spark, ScikitLearn, Pyspark, Supervised/Unsupervised learning, Deep Learning, Reinforcement Learning, Exploratory Data Analysis.

Projects

MoviesFlix - Movie Recommender System |[Github]

- Implemented content-based filtering algorithms, demonstrating a solid understanding of statistical principles in predictive modeling.
- Developed the core recommendation engine using Python, showcasing advanced programming and scripting abilities.
- Utilized popular Python libraries for data manipulation and analysis, such as Pandas and NumPy, to process and analyze movie data.
- Streamlined the data engineering process by designing an efficient collection and preprocessing pipeline, reducing space complexity by 97% and implementing strategic data manipulation techniques like filtering and indexing, significantly boosting storage, retrieval efficiency, and overall system performance
- Developed a full-stack web application, demonstrating an end-to-end understanding of data flow and application architecture in a data engineering context.
- Technologies: React.JS, Python, Javascript, Numpy, Pandas, Flask, Google Firebase, Kaggle Movies Dataset, TMDB API.

Learner's Pax |[Github]

- Designed and developed a versatile user-friendly teacher-student document sharing system to facilitate information sharing, including e-notes, assignments, announcements, and syllabus, for all university degree programs, semesters, and courses.
- Implemented real-time email notifications to keep students updated about new materials and assignments, enhancing communication and engagement.
- Integrated Google Drive API for efficient data storage and retrieval, ensuring scalability.
- Enabled CRUD operations for teachers to manage content effortlessly.
- Technologies: Javascript, ReactJS, NodeJS, Google Drive API , Nodemailer , MongoDB Atlas.