

Pranav Donepudi

Houston,TX | donepudipranav04@gmail.com | 6507594788 | Portfolio | [LinkedIn](#) | [GitHub](#)

Skills

- HTML, CSS, JavaScript, React, Angular, Bootstrap, Tailwind CSS.
- Node.js, Express, Django, Flask, Spring Boot.
- Java, Python, C#, C++ , JavaScript, TypeScript.

Education

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|--|-------------------|
| Rice University , Masters in Computer Science | Aug 2023-Dec 2024 |
| <ul style="list-style-type: none">• Positions: Teaching Assistant for Introduction to data science for graduates.• Coursework: Probabilistic Algorithms, Object Oriented Programming. | |
| IIIT Bhubaneswar , Bachelors in Electronics and Telecommunications | Aug 2017-Aug 2021 |

Experience

- | | |
|---|---------------------|
| Software Developer Intern , SBS Corps-Houston, TX | May 2023 – Jul 2023 |
| <ul style="list-style-type: none">• Designed and implemented a chatbot feature to improve user engagement and automate customer support. Refactored existing codebase to improve readability, maintainability, and performance, resulting in a 20% reduction in response time.• Conducted code reviews and refactored legacy code to adhere to best practices, improving overall code quality and reducing technical debt. Implemented coding standards and documentation guidelines, making the codebase more accessible for future developers.• Ensured API security and scalability, handling over 10,000 requests per day without downtime. | |
| Associate Software Engineer , DXC Technology – Bangalore, KA | Sep 2021 – Jul 2023 |
| <ul style="list-style-type: none">• Designed and implemented end-to-end data orchestration workflows using tools like Apache Airflow and Prefect, enabling seamless data integration and transformation across 10+ data sources, reducing processing time by 30%.• Built scalable, secure RESTful APIs using Spring Boot for financial services applications, supporting 1M+ monthly transactions and improving system interoperability.• Integrated Jenkins for CI/CD pipelines and incorporated SonarQube for static code analysis, improving code quality by 25% and reducing deployment failures by 50%. | |

Projects

URL Shortner

- Engineered a full-stack application using React for the frontend to create a user-friendly interface for link management.
- Integrated Redis as a NoSQL database to significantly reduce latency by caching frequently accessed data, enhancing the overall response times of the service.

Real time chat application

- Leveraged the MERN stack (MongoDB, Express.js, React, Node.js) enhanced with Socket.io for real-time bi-directional communication between clients and servers.
- Integrated JWT (JSON Web Tokens) to handle secure authentication and authorization processes, safeguarding user interactions and data. Engineered comprehensive error handling mechanisms on both the server and client sides to enhance application reliability and user trust.

Genomic Data Querying Optimization

- Developed a probabilistic data structure that minimized false positives by optimizing filter partitioning across multiple levels, enabling efficient genomic membership testing.
- Optimized query performance, reducing the false positive rate from 0.09 to as low as 0.03 in high-capacity scenarios, significantly outperforming traditional methods.

Custom Content Management System (CMS) for Small Businesses

- Engineered a scalable and secure CMS using the MERN stack, allowing businesses to manage web content efficiently.
- Utilized React.js and Tailwind CSS to create an intuitive and responsive user interface, improving the overall user experience.
- Developed features for publishing content in multiple languages, expanding business reach across diverse demographic segments. Implemented HTTPS/SSL, data encryption, and security best practices to safeguard sensitive information and user data.