Ritwik Goel

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EDUCATION

Columbia University   New York, NY
Master of Science in Computer Engineering [3.7/4.0]   Expected Dec 2024
Relevant Coursework: Cloud Computing, Computer Networks, Big Data, Databases

Vellore Institute of Technology   Vellore, TN
Bachelor of Technology in Computer Science and Engineering, [8.73/10]   Jul 2023

EXPERIENCE

Dice Enterprises   Pune, MH
Backend Developer Intern   Oct 2022 - Mar 2023

- Prototyped and created live production API's to enhance search functionality on the platform, leading to a substantial 22% reduction in user search time through optimized data structures.
- Streamlined the platform by porting code to vert.X, introducing boosted concurrency, and ensuring a more responsive user experience.

VeUp Technologies   Bangalore, KA
Full Stack Developer Intern   Dec 2021 - May 2022

- Optimized service sending scripts by executing a robust database caching mechanism, resulting in a 31% reduction in data retrieval time, and improved overall efficiency.
- Designed and delivered multiple full-stack applications and REST-APIs for diverse clients, leveraging AWS services such as Lambda, S3, and EC2, to ensure seamless and scalable deployment for enhanced user experiences.

ACADEMIC PROJECTS

BotScan

- Developed an innovative mobile application utilizing Flutter and TensorFlow libraries, Optical Character Recognition, and Text-To-Speech to aid visually impaired individuals, enabling them to have text read aloud through their smartphone camera.
- Implemented Bionic reading functionalities, with external APIs, to further boost the reading experience for users with visual challenges.
- Facilitated greater accessibility and inclusivity by providing the application on the Google Play Store for easy access and adoption.

R3 Authentication

- Implemented an innovative 2FA login system utilizing speaker recognition technology. Extracted and processed Mel frequency cepstral coefficients with Meyda.JS to achieve precise and reliable speaker verification with over 87% accuracy.
- Constructed using Node.js and React for the backend and frontend, respectively, with MongoDB as the database. Leveraged Git for version control for code management throughout the development process.
- Presented the project at a conference of 100+ attendees. Published as a book chapter. The project's implementation of multilinear regression added a cutting-edge dimension to its accomplishments.

SciSearch

- Streamlined for researchers, the intuitive application simplifies registration, login, and personalized collection creation, fostering an increased and user-friendly experience.
- Designed and deployed a database, honing data integrity and reliability, executing triggers and assertions for seamless interaction with the Semantic Scholar API.
- Hosted on Google Cloud, both the website and database ensure scalability, reliability, and efficient performance, providing an uninterrupted user experience worldwide.

ACTIVITIES

General Secretary @ Computer Society of India- VIT Chapter   Dec 2019 - Dec 2022

- Orchestrated and led a dynamic team of 27 in organizing 10+ events, drawing an impressive total of over 8000 participants.
- Headed the organizing committee of DevSpace, one of India's largest international-level hackathons, further establishing the chapter's prominence in the tech community.

Open Source Contributor @ NetSepio   Aug 2022 - Oct 2022

- Collaborated with a team of 3 to create a sophisticated Discord utility bot. Delivered a solution for detecting phishing links on main server using GraphQL, golang and Kubernetes, ensuring consistent performance and scalability of the utility bot.

SKILLS & INTERESTS

Java, Flutter, AWS, GCP, C++, Docker, MERN, PostgreSQL, MATLAB, Python, REST, Hadoop, golang, git and scikit-learn.