ARUP CHAUHAN

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EDUCATION

Illinois Institute of Technology, Chicago, Illinois Aug 2023 - May 2025
Master of Science - Computer Science
Relevant Coursework: Advanced Database Organisation, Information Retrieval, Operating Systems

Dr.A.P.J. Abdul Kalam Technical University, Lucknow, India Aug 2014 - May 2018
Bachelor of Technology - Computer Science and Engineering - GPA: 3.49
Relevant Coursework: Data Structures, Design and Analysis of Algorithms, Software Engineering

SKILLS

- **Technologies:** C/C++, Python, Java, TypeScript, JavaScript, HTML, CSS
- **Databases** MySQL, Mongo DB, Firebase Realtime DB, Cloud Firestore, Versant Object Database (OODBMS)
- **Platform & Tools:** Git, GitHub, CI/CD(GitHub Actions), Apache Tomcat, JIRA, Freshservice
- **Framework & Libraries:** Node.js, Express.js, Next.js, React, Qt, OpenCV, NumPy, Pandas, Postman, Jest
- **Other:** Competitive Programming, RESTful APIs, Agile Methodologies, Test-Driven Software Engineering, Software Development Life Cycle, Requirement Analysis, Technical Writing

EXPERIENCE

Open Source Developer (TypeScript, Tailwind CSS, Next.js, Firebase, RESTful APIs, Postman) Jan 2024 - Feb 2024
FOSS Overflow Knowledge Sharing Platform, Indian Institute of Technology, Bhilai

- Build RESTful APIs to add a content moderation feature to the project, triggering content upload failure if profanity is detected in the uploads.
- Achieved a minimum accuracy rate of 95% in non-context-based and 75% context-based profanity detection, demonstrating a high level of content filtering effectiveness.
- Recognized as a key contributor amidst 300+ proposals globally, tasked with project collaboration.

Application Engineer (C++, JavaScript, Java, XML, Versant Object Database, Jest(Testing)) Jul 2018 - Apr 2022
Hindustan Times through Four C Plus (Internet) Co.Ltd., New Delhi

- Developed a C++ Dynamic-Link Library (DLL) for .NET-based desktop applications, optimizing news feed and media asset transfers from content management servers to proprietary digital asset management (DAM) softwares, resulting in a 15% reduction in system resource utilization and increased application uptime.
- Implemented a suite of Java servlets with C++ based .NET library integration to seamlessly ingest XML and image files from news agencies. Achieved a throughput exceeding 95% accuracy and within a maximum latency of 500 milliseconds per file.
- Seamlessly integrated JavaScript based social media functionalities into Swing, a web-based content management.This resulted in a 20% increase in user engagement and a 15% rise in content reach within the first month of implementation.
- Speaheaded IT Service Management tool implementations as subject matter expert, creating workflows and collaborating with vendors on proof of concepts.Validated workflow automation scripts using Jest, resulting in a 20% reduction in resolution times through efficient ticket segregation.

PROJECTS

Image Processing Application (C++, Qt Framework: Qt Core, Qt Widgets)
Project Link

- Designed an image processing application capable of exporting image data to a text file as a 2D array.
- Incorporated advanced image analysis functionalities including calculating the percentage of dark pixels, determining connected components, and identifying maximum blob areas.

Interactive Pathfinding Algorithm Visualisation Tool (Javascript, React, HTML, CSS)
Project Link

- Built an interactive web-based application to visualize pathfinding algorithms, Dijkstra's Algorithm, in real-time.
- Allowed user customizable the visualization by adding walls, start and end nodes, and then observing the algorithm's path-finding process step-by-step.

URL Shortner (Mongo DB, Express.js, Node.js)
Project Link

- Created a URL-shortening application to generate condensed links from long URLs.
- Integrated features such as custom URL generation, click tracking, and URL expiration.