Ajay Yadav

About Me

Software engineer at Philips working on MR post-processing with C# and .NET. I enjoy solving problems, building useful features, and am learning backend development to grow my skills and contribute more to projects.

Work Experience

Philips Healthcare - MR

June 2024 - Present

Software Development Engineer

Bengaluru, Karnataka

- Working on MR post-processing tools using C# and .NET to improve features and support better performance.
- Created an algorithm to generate random 3D points inside MR image volumes for testing and quality verification.
- Fixed 5-6 bugs related to incorrect data loading and viewport display in MR post-processing applications and tools.
- Built an application launcher to run post-processing tools independently without starting the full MR application.
- Created a feature to launch the application on another system within the same network using its IP address.
- Adapted the application launcher for post-processing tools to improve automated test execution time significantly.

Philips Healthcare - DXR

June 2023 - May 2024

Software Development Engineer Intern

Bengaluru, Karnataka

- Developed a string compression and decompression algorithm using Burrows-Wheeler Data Transform, Run-length Encoding, and additional modifications. This approach ensures effective data compression and decompression.
- Built an interface to remove cross-team dependencies, used by 30+ components; refactored all related modules.
- Fixed 2 issues: keyboard positioning and Chinese language bug after settings change to improve user experience.
- Designed a password manager plugin in the PII Toolkit for secure password retrieval and validation by services.

Key Projects

RealTime News Application | React.js, Css

Github 🖸

- Built a web app using React.js and a public API to display real-time global news across multiple categories.
- Fetched and rendered live news data by country and category using a free API to provide up-to-date headlines.
- Added a search feature allowing users to find news articles quickly by typing keywords or topics of interest.
- Designed a clean UI with left-side navigation, responsive layout, and dynamic rendering of live news updates.

Bank Account Blockchain Project | React.js, Motoko, CSS

Github 🞧

- Built a decentralized banking application using React.js and Motoko, offering features such as account creation, login/logout, viewing balances, and transferring funds securely between users on the Internet Computer platform.
- Used a Map-based storage model in Motoko to manage account data, enabling fast lookup of user balances and smooth handling of secure fund transfers, ensuring data consistency and responsiveness across user interactions.

Coding Achievement and Certifications

- Became a 3-Star rated coder on Codechef and secured 48th rank in the Starters 63 contest.
- Secured a position within the top 100 in Coders Combat, an event organized by LPU and GeeksforGeeks.
- Became a 3-Star rated coder on Leetcode and Earned the title of Knight on Leetcode with a rating of 1914.
- Earned the DSA Self-Paced certification from GeeksForGeeks, solidifying foundational knowledge and mastery of essential concepts in Data Structures and Algorithms.
- Completed the React Certification program from Cipher School, organized by LPU.

Technical Skills

Core : Data Structures, Algorithms, Operating System, OOPs, DBMS

Languages : C, C++, Java, Python, C#, JavaScript

• Technologies : React.js, HTML, CSS, JavaScript, Tailwind CSS, Bootstrap, .NET Framework, NUnit, JUnit

• Tools and Services: Git, GitHub, VS Code, Visual Studio, Postman

Education