YASHPAL YADAV

IIIT Hyderabad, Telangana, India

📞 +919792744442 ✉ yashpalyadav050@gmail.com ✉ yashpal.yadav@research.iiit.ac.in 🔗 linkedin.com/in/yashpal-yadav-990278221

EDUCATION

International Institute of Information Technology, Hyderabad **2022-2026**
B. Tech. + MS (Research) in CSE *Hyderabad, Telangana*

Banaras Hindu University **2018-2021**
B. Sc. (Hons.) in Physics *Varanasi, Uttar Pradesh*

EXPERIENCE

SKDIV® Industries Private Limited **May 2024 - Present**
Frontend Engineer (Remote) Aug 2025 - Present
- App Store URL: https://apps.apple.com/au/app/crew/id6739217561
- **Architected** and **implemented** the "CREW Calling" feature, leveraging Flutter and the Livekit SDK to deliver high-quality, real-time audio communication for both 1-on-1 and group calls.

Frontend Developer Intern (Remote) May 2024 - Aug 2025
- Engineered the core real-time messaging frontend for the CREW platform using Flutter, implementing secure WebSocket connections to facilitate seamless exchange of text, images, and voice notes.
- Implemented robust offline capabilities by integrating IndexedDB with a Redis cache backend, ensuring users have uninterrupted access to recent conversations and significantly boosting application resilience.
- Enhanced user engagement by integrating Firebase Cloud Messaging (FCM) to deliver timely and reliable push and in-app notifications, ensuring critical updates are never missed.

Software Engineering Research Center **May 2023 - July 2024**
Undergraduate Researcher *IIIT Hyderabad*
- **Demo URL:** https://vlab-os.github.io/OS4all/
- Worked on creating a web-based platform for students all over India to learn Operating System concepts through interactive lab.
- Led the development of *'Process Life Cycle'*, *'Context Switching'*, and *'Scheduling'* experiments using HTML, CSS, and JavaScript, resulting in a 20% increase in student engagement and understanding of complex OS concepts..
- Integrated Express.js for backend operations of the *'Process Life Cycle'* experiment, enhancing data analysis capabilities and reducing data processing time by 15%, leading to more efficient project outcomes

HydrowVerse Pvt Ltd. **Jan 2023 - May 2023**
Project Intern *Hyderabad, Telangana*
- **Application URL:** https://play.google.com/store/apps/details?id=com.mycompany.hydrow
- Engineered the Hydrowverse app using *Flutter*, seamlessly integrating IoT devices via API calls to fetch real-time data from ThingSpeak, enhancing user experience and data accuracy by 30%.
- Designed intuitive interface using *Flutter* to provide users with live water level updates, daily usage tracking, and detection of potential wastage using "Starr" smart water level device.
- Established seamless device-phone connectivity via QR code scanning, enabling users to conveniently get notification alerts & access water resource summaries.

PROJECTS

Greddit [Design & Analysis of Software Systems] | *MongoDB, Express.js, React.js, Node.js*
- Link to the project
- Engineered a Reddit-like web application using the MERN stack, incorporating a live chat feature powered by Mondo Cloud services

ML Algorithms [Statistical Methods in AI] | *sklearn, pandas, numpy, Python3, hmmlearn*
- Implementation of various Machine Learning algorithms from scratch like, PCA, K-means, GMM, Multinomial Logistic Regression/Classification, Multi Layer Perceptron, Decision Trees.

Clash of Clans [Design & Analysis of Software Systems] | *Python3, OOPs, unittest*
- Link to the project
- A terminal based game inspired by Clash of Clans, implemented using Python3.
- The game consists of different levels and charaters with unique abilities along with buildings and troops.

Linux Terminal [Operating System & Networks] | *C, Operating System, Linux, System Calls*
- Link to the project
- Developed a Linux Terminal in C, leveraging kernel system calls exclusively.
- Implemented extensive functionality including command execution, process management (foreground and background), process information retrieval, input/output redirection, and process termination.

Scheduler for xv6 OS [Operating System & Networks] | *C, Operating System, Kernel, Linux, System Calls*
- Link to the project
- Developed syscall tracing ('strace'), FCFS, PBS, and MLFQ schedulers by modifying core modules.
- Enhanced process management with creation time, dynamic priorities, and priority queues, improving scheduling efficiency.

TECHNICAL SKILLS

Languages: C/C++, Python, HTML/CSS, JavaScript, Typescript, Dart, SQL, React, MongoDB, Express.js, Node.js, Racket, R
Developer Tools: VS Code, Android Studio, Postman, Jupyter Notebook, Org-mode, Markdown
Technologies/Frameworks: Linux, GitHub, Gitlab, Flutter, Mongo, Firebase, ThingSpeak, Bootstrap

SOFT SKILLS

Problem Solving,Leadership,Communication,Teamwork,Time Management,Adaptability,Critical Thinking,Work Ethics, Creativity,Collaboration,Leadership,Decision Making,Interpersonal Skills,Attention to details.