KHAN ARSIL

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SUMMARY

Technically skilled professional with expertise in PHP, database management, PC hardware, and web application development. Experienced in EMR module testing, paediatric dosage calculation systems, UI design, and software deployment. Developed a Wi-Fi CSI-based human sensing system using ESP32 and Python, and a YOLOv8-based fall detection system using OpenCV. Skilled in functional testing, debugging, and software integration, with a strong ability to learn, adapt, and grow.

SKILLS

- **PHP:** Server-side scripting, form handling, sessions & cookies, database interaction.
- **Python:** NumPy, Pandas, Matplotlib, PyTorch, TensorFlow, data analysis, scripting & automation, signal processing.
- **JavaScript:** DOM manipulation, event-driven programming, asynchronous programming, Promises & async/await, closures.
- **Web Development:** HTML, CSS, React.js, Node.js, UI design, responsive layouts, API integration.
- **Database Management:** SQL, MySQL, PostgreSQL, Supabase, database design & integration.
- **Machine Learning:** Deep learning, CNNs, GNNs, YOLOv8, computer vision, OpenCV, Wi-Fi CSI, model training & evaluation.
- **Tools & Deployment:** Git, GitHub, AI-assisted development, application deployment, technical documentation.
- **Robotics:** ROS 1, ROS 2, Franka Emika Panda, Gazebo.

EDUCATION

Bachelors in Computer Engineering **Sep 2023 - May 2026**
Maulana Mukhtar Ahmad Nadvi Technical Campus

Diploma in Computer Engineering **Aug 2021 - June 2023**
Abdul Razzak Kalsekar Polytechnic

INTERNSHIPS

Noorisys Technologies Pvt. Ltd. (6 Months, Full Time) **June 2026 - Present**

- Developed and tested EMR modules for medical and non-medical staff.
- Enhanced a pediatric dosage calculator using medicine databases, dosage formulas, and BNF for Children references.
- Conducted functional testing, identified bugs, and validated features across development and staging environments.
- Created product demos, subtitles, and user documentation for ClinicDots modules.
- Built web applications and landing pages using AI-assisted tools, covering UI design, database integration, and deployment.

Paarsh Infotech **Dec 2024 - Feb 2025**

- Understand the HTML, CSS, Boot-Trap, and JavaScript languages.
- Understand how to develop Software and Programming using a back-end language.
- Understand how to know about the OPPs Concept in the PHP language.
- Create a SQL Database, front-end, and back-end.
- Know about the Server-side programming language.

IGNITECH **July 2022 - Aug 2022**

- Gained foundational knowledge of OOP, Data Structures, Class and Objects, and MySQL in PHP.
- Created the database of the project such as data storage, data organizing and relationship, CRUD operations, Indexing.

PROJECT

Wi-fi Based Human Sensing Using Deep Learning

- Developed a real-time human sensing system using ESP32-WROOM-32 and Channel State Information (CSI).
- Implemented passive Wi-Fi CSI data acquisition using ESP-IDF and Wi-Fi CSI APIs.
- Processed CSI signals to detect human presence and movement without cameras or wearables.
- Designed Python-based signal processing algorithms to identify motion patterns.

Human Fall Detection Using OpenCV

- Developed a YOLOv8-based system to detect human falls and non-fall events.
- Applied dataset preprocessing, balancing, and augmentation to improve model accuracy.
- Fine-tuned detection models using transfer learning and hyperparameter optimization.
- Evaluated performance using Precision, Recall, F1-Score, and Confusion Matrix.
- Generated training curves, Precision-Recall curves, and detection visualizations.
- Achieved promising detection performance for healthcare and elderly monitoring applications.

Abjad ERP – Business Management System

- Developed and enhanced a web-based ERP system for managing invoices, challans, quotations, purchases, inventory, and customer records.
- Integrated Supabase for database management, authentication, and role-based access control.
- Implemented document workflows, automated calculations, email integration, and Google Drive connectivity.
- Managed development and production environments using GitHub, Vercel, and Supabase.

Business Marketing Websites

- Designed and developed responsive marketing websites for business branding, product promotion, and customer engagement.
- Built a fabric business website featuring a product catalogue and multiple fabric brands.
- Developed reusable UI components, interactive navigation, and responsive layouts using React.js and modern web technologies.
- Managed GitHub workflows, deployment, and website optimization.