

MUHAMMAD TATHEER

Full Stack Developer — Web, Mobile, Applied AI & IoT

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PROFILE

Full stack developer who ships complete, documented products — React and Next.js frontends, Node/Express and FastAPI services, Flutter and Kotlin apps, and applied AI that runs on-device where privacy matters. Eleven public repositories, five live deployments and a consistent habit of publishing the honest limits of a build alongside its features.

11 PUBLIC REPOSITORIES	40 GITHUB STARS	5 LIVE DEPLOYMENTS	6 LANGUAGES SHIPPED
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SELECTED PROJECTS

Irssa — Pakistan Sign Language Learning App Kotlin · Jetpack Compose · MediaPipe
Offline Android app for deaf and speech-impaired children · github.com/tatheer583/psl-sign-learn

- Teaches 37 Urdu Pakistan Sign Language letters and 26 English letters as separate alphabets, using real hand photographs and familiar words.
- On-device camera coach built on MediaPipe Hand Landmarker (21 landmarks) with a nearest-neighbour classifier trained on independent signers; frames never leave the device.

ChannelAI — Open Source Channel Automation TypeScript · React · Canvas · YouTube API
MIT-licensed, self-hostable video workflow · github.com/tatheer583/channel-automation-ai

- Renders reels genuinely in the browser with canvas crop and MediaRecorder, exports timed SRT and VTT captions, and captures full-resolution thumbnails.
- Schedules publishing through the official YouTube Data API with the user's own OAuth client; footage is never uploaded to a third-party service.

WiWave Motion — WiFi Sensing Workbench Python · FastAPI · React · ESP32
Device-free motion sensing with a laptop radio · github.com/tatheer583/WIWAVE-MOTION

- Samples RSSI about ten times per second through the Windows WLAN API and fuses the router with neighbouring access points as independent environment channels.
- Adds 30-second Welch spectral analysis, a SQLite event journal with before/after context, and a 52-subcarrier CSI pipeline for an optional ESP32 receiver.

Jarvis — Local Windows Desktop Assistant Tauri · Rust · React · Python
Voice and typed automation with an explicit policy boundary · github.com/tatheer583/jarvis-ai-assistant

- Controls applications, windows, keyboard, mouse, volume and files, with confirmation prompts before any destructive operation and a separate audit database.
- Deterministic commands work with no API key; offline Whisper speech recognition and local Qwen chat are optional add-ons, not requirements.

Skardu Spring — Full-Stack Commerce Platform Next.js 15 · Express · MongoDB
Monorepo storefront and API for a Karakoram mineral water brand · skardu-spring-frontend.vercel.app

- Next.js 15 App Router storefront with a glassmorphism design system, Framer Motion transitions and Swiper carousels.
- Modular Express API with JWT authentication, bcrypt hashing and Mongoose models, plus an OpenAI-powered concierge behind dedicated service layers.

CyberSathi — Offline AI Scam Analyzer Python · FastAPI · Ollama · SQLite
Local threat analysis for messages, email, QR codes and URLs · github.com/tatheer583/Cyber-Sathi

- Runs a local Gemma model through Ollama alongside deterministic checks for sender domains, malware, OTP requests and a blocklist of known scam domains.
- Scans persist locally through SQLAlchemy, and the React PWA supports English, Urdu and Roman Urdu — with no cloud LLM in the detection path.

TECHNICAL SKILLS

Languages	TypeScript, JavaScript, Python, Dart, Kotlin, Rust, SQL, HTML/CSS
Frontend	React 19, Next.js 14/15, Tailwind CSS, Framer Motion, Vite, CSS Modules, D3.js
Backend	Node.js, Express, FastAPI, Flask, REST APIs, JWT authentication, WebSockets
Mobile & Desktop	Flutter, Jetpack Compose, Tauri, Riverpod, go_router
Data	MongoDB, Mongoose, SQLite, SQLAlchemy, local-first persistence
AI & Vision	MediaPipe, scikit-learn, Random Forest, Ollama, Gemma, OpenAI API, Whisper
IoT & Sensing	ESP32, Arduino, MQ gas arrays, WiFi RSSI and CSI, real-time pipelines
Tooling	Git, GitHub Actions, Docker, Vercel, GitHub Pages, Playwright

EDUCATION

NUTECH University — Bachelor of Science Computing, intelligent systems and applied engineering.	2025 — 2029 · Islamabad, Pakistan
Public School and College Skardu — Intermediate	2023 — 2025 · Skardu, Pakistan
Model Boys High School, Khaplu — Matriculation	2021 — 2023 · Gilgit-Baltistan, Pakistan

OPEN SOURCE & RECOGNITION

- Eleven public repositories with 40 stars and 2 forks; five projects deployed and linked live.
- Released ChannelAI and CyberSathi under the MIT licence, including setup documentation and known limits.
- Built an accessibility-first product (Irssa) for deaf children with a fully offline recognition model.
- Comfortable working across time zones; based in Islamabad (UTC+5), open to full-time and freelance work.

Every project above is public and verifiable at github.com/tatheer583. Live demos, source code and documentation are linked from tatheer583.github.io/portfolio.