

Abdul Mughees

Full Stack Engineer

+92 3009695008 mughis.mirza95@gmail.com Islamabad
in/abdul-mughees github.com/mughees mughees.dev

SUMMARY

Full Stack & Backend Engineer (Elixir/Python) with 5+ years of experience building secure, cloud-native distributed systems. Specialized in mTLS, PKI automation, and UL/ISO-compliant security architectures for IoT and SaaS platforms. Proven leader delivering high-impact systems at scale.

CORE SKILLS

Security: mTLS, PKI, CSR automation, OCSP/CRL, JWT, AppAttest, Play Integrity, UL 2900/2941, ISO 27001

Languages: Elixir, Python, JavaScript, SQL, C#, Bash

Frameworks: Phoenix, LiveView, Django, Flask, FastAPI, React.js, Alpine.js, Tailwind

Cloud & DevOps: AWS, GCP, Docker, GitHub Actions, CI/CD, Linux, Nginx/OpenResty

Tools: Git, Grafana, Prometheus, Loki, Playwright

PROFESSIONAL EXPERIENCE

Senior Software Engineer, (SkyElectric)

Islamabad, Pakistan Nov 2024 - Present

- Designed and implemented a production-grade **mutual TLS (mTLS) and PKI infrastructure** for cloud-connected IoT and mobile systems, including a custom Certificate Authority in Elixir, automated CSR validation, short-lived certificates, secure key provisioning, and certificate rotation and revocation (CRL/OCSP).
- Built **zero-downtime certificate enforcement** using Nginx/OpenResty with Lua shared dictionaries and Elixir GenServers, enabling real-time CRL updates without service disruption across a nationwide IoT fleet.
- Led and implemented **UL 2900 / UL 2941-compliant cybersecurity controls**, enforcing cryptographic requirements, encrypted transport verification, secure key handling, and audit-ready logging; authored complete security documentation and evidence for UL and ISO/IEC 27001 certifications.
- Upgraded Absinthe GraphQL from 1.4 to 1.8, refactoring **600+ APIs** for compatibility and stability; added telemetry and tracing, improving observability by **50%** and reducing debugging time by **30%**.
- Developed advanced solar analytics tools (shadow detection, dust detection, PV string drop analysis), improving system performance and increasing energy efficiency by **15%**.
- Collaborated closely with firmware, hardware, electrical, and non-technical teams to improve reliability, security posture, and operational performance of SkyElectric's distributed energy platform.

Full Stack Engineer, (Softteams a/s)

Islamabad, Pakistan Dec 2023 - Nov 2024

- Led a team of five developers to deliver 12 new features in a 6-month period, improving development efficiency by 30% through streamlined processes and best practices.
- Led a 90-day MVP project to streamline EFRAG reports, increasing client satisfaction by 20% and speeding up development by 30%.
- Built Docker-based CI/CD pipelines, reducing deployment failures by 40% and accelerating releases by 50%.

Software Engineer, (InvoZone Pvt. Ltd.)

Lahore, Pakistan Jul 2021 - May 2023

- Worked in a cross-functional team to deliver 7 high impact solutions using Elixir, Phoenix, PostgreSQL, and React.js, which improved product quality by 40% and increased platform sales by 15% within 4 months.
- Developed a proprietary video conferencing solution that cut costs by 60% by eliminating the need for third-party SDKs and improved internal communication efficiency by 35%.
- Mentored an intern through weekly code reviews and knowledge sharing sessions, increasing their productivity by 20% and enabling them to secure full-time roles.

Python Developer, (EastWest Soft)

Sahiwal, Pakistan Aug 2020 - Jun 2021

- Engineered an automation suite for a food chain, resulting in a 23% increase in productivity.
- Collaborated on the development of an Anti-Theft System incorporating machine learning algorithms, successfully reducing cash losses by 80%.
- Co-led engineering taskforce in charge of standardization and acceleration of organization-wide data warehouse migration by developing automated Python3 tooling for engineers under a tight company wide deadline.

Senior Software Engineer, *(Freelance / Consulting)*

Remote Oct 2019 - Present

- Delivered **50+ production-grade automation, data extraction, and backend systems** for international clients using Python, Elixir, and PostgreSQL, with a focus on reliability, security, and maintainability.
- Designed and built **20+ full-stack web applications** and backend services, modernizing legacy systems, improving performance, and enhancing user experience through clean architectures and scalable APIs.
- Built a **biometric authentication platform** using Elixir and Phoenix LiveView, incorporating AI-based identity verification, significantly improving login security and reducing authentication latency by **50%**.
- Developed secure scraping and integration pipelines using Scrapy, Selenium, and Playwright, implementing rate-limiting, proxy rotation, and fault-tolerant job execution for long-running workloads.
- Acted as a **technical consultant** for clients on system design, cloud deployment, and security best practices, maintaining a **95%+ client satisfaction rate** across long-term engagements.

EDUCATION

BS in Computer Science *COMSATS University Islamabad*

Islamabad, Pakistan 2016-2020

CERTIFICATIONS

Google IT Automation with Python *Google*

Coursera.org 2021

Python for Everybody Specialization *University of Michigan*

Coursera.org 2020