MINA ASHRAF MONIR

Software Engineer & IT Specialist

Cairo, Egypt | +20 101 524 2593 | minaashraf285@gmail.com | Portfolio: portfolio.minaashraf285.workers.dev

GitHub: github.com/mina-android | LinkedIn: linkedin.com/in/mina-ashraf-monir

PROFESSIONAL SUMMARY

Multi-disciplinary Software Engineer and IT Specialist with 4+ years of hands-on experience designing reliable offline-first applications, full-stack systems, and managing enterprise IT infrastructure. Computer Science graduate with extensive self-taught knowledge in CCNA and MCSA. Proven track record of developing production software—ranging from high-concurrency venue management platforms with real-time WebSockets and automated thermal printing to open-source mobile applications with 66+ GitHub stars—alongside reliable system and network operations across 25–50 user multi-platform environments.

CORE TECHNICAL SKILLS

Programming Languages: Dart, Python, JavaScript / TypeScript, Kotlin, C++, Java, SQL, HTML5, CSS3 / Tailwind CSS

Frameworks & Libraries: Flutter, Next.js 15, Node.js, Express.js, React, Electron, Payload CMS 3, Provider

Systems & IT Infrastructure: Windows Server, Windows 10/11 Pro/Enterprise, Linux (Ubuntu, Debian), TrueNAS SCALE, Docker Compose, POS Thermal Printing (ESC/POS), Barcode Scanners, Custom PC Architecture

Networking & IT Operations: TCP/IP, DNS, DHCP, IPv4 Subnetting, LAN / WLAN Deployment, Router & Switch Configuration, Wi-Fi Optimization, Network Printer Provisioning, Cat6/RJ-45 Cabling, Wireshark, SaaS & License Management, Automated Backup Strategies

Databases & Cloud: PostgreSQL, SQLite, Firebase (Firestore, Authentication), Cloudflare Workers, Git / GitHub

PROFESSIONAL EXPERIENCE

Rada Public Relations — Cairo, Egypt | **IT Specialist (Full-Time)** **February 2026 – Present**

- Direct IT operations for 25–50 multi-platform endpoints (Windows 11, macOS); deployed custom IT Box to digitize hardware inventory, serials, warranties, and peripheral assignments.
- Supervise enterprise SaaS software subscriptions, removing redundant license seats and cutting monthly recurring operational expenses.
- Manage multi-function network printers, access control policies, and daily network health across office floor plans.
- Terminated and tested structured network cabling, set up wireless routers with WPA3/WPA2 authentication, and maintained local office network integrity.
- Deployed and maintained local office network infrastructure (switches, Wi-Fi access points, routers, network printers), diagnosing latency and resolving connectivity drops.

El Helal Import & Export — New Cairo, Egypt | **IT Specialist (Part-Time)** **September 2023 – July 2025**

- Administered on-premise Windows Server system, managing central network shares, user access levels, and file permissions for 30+ operational employees.
- Architected and executed an isolated, offline scheduled backup routine to external storage drives, securing critical customs, import, and accounting records against ransomware.
- Deployed and maintained local office network infrastructure (switches, Wi-Fi access points, routers, network printers), diagnosing latency and resolving connectivity drops.

Rada Public Relations — Cairo, Egypt | **IT Specialist (Part-Time)** **November 2021 – July 2025**

- Delivered Level 1/2 helpdesk support for 40+ workstations, resolving hardware failures, driver conflicts, OS errors, and automating cloud backups for critical multimedia assets.
- Terminated and tested structured network cabling, set up wireless routers with WPA3/WPA2 authentication, and maintained local office network integrity.

FEATURED ENGINEERING PROJECTS

Theatre System — Unified Festival Management Platform | *Electron, Node.js, Express, WebSockets (ws), PostgreSQL, Docker*

- Engineered a full-stack, venue-wide operations platform deployed across on-premise LAN
- Developed a real-time multi-device synchronization engine using WebSockets with exponential backoff reconnection and randomized jitter, synchronizing box office sales, gate admissions, jury scoring, and projector feeds with sub-second latency.
- Integrated automated silent ESC/POS thermal ticket printing and gate barcode scanning verification, facilitating rapid attendee check-ins without queues.
- Packaged the server and database infrastructure using Docker Compose with PostgreSQL for automated local failover and reliable zero-cloud operation.

Expensy — Local-First Personal Finance Manager | *Flutter, Dart, SQLite, Provider* **— Open Source (66+ Stars, 7+ Forks on GitHub)**

- Built and published an offline-first personal expense tracker emphasizing complete data privacy (zero cloud sync, zero trackers, zero ads).
- Designed an optimized SQLite database schema with indexed queries for sub-millisecond calculation of multi-account balances, categories, and monthly budgets.
- Crafted a Material You adaptive UI with smooth animations, custom transaction filtering, and encrypted local backup/restore functionality.

IT Box — IT Operations & Hardware Inventory Hub | *Flutter, Dart, SQLite* **— Production Deployed at Rada PR**

- Designed and built an offline-first IT operations desktop/mobile application to manage internal hardware lifecycles, warranties, and maintenance logs.
- Implemented real-time hardware status categorization, peripheral checkout assignment, and software license expiry alerts with zero third-party dependencies.

NAS Dash — TrueNAS SCALE Server Dashboard | *Flutter, Dart, REST APIs, WebSockets*

- Developed a native Android control panel and system monitoring dashboard interfacing directly with TrueNAS SCALE storage servers.
- Displays live telemetry for ZFS storage pools, CPU/RAM utilization, network interface bandwidth, disk temperatures, and system service alerts via authenticated API endpoints.

FitVerse — AI Coaching & Biometric Fitness Ecosystem | *Flutter, Google Gemini AI, Firebase, Accelerometer*

- Created a mobile fitness coaching application featuring real-time accelerometer motion coaching algorithms to verify exercise repetitions.
- Integrated Google Gemini AI to analyze workout performance telemetry and deliver customized post-workout guidance; synchronized across devices via Firebase/Firestore.

KMT Of Egypt | *Next.js 15, Payload CMS 3, TypeScript, PostgreSQL, Docker Compose*

- Developed a production bilingual web platform (English & Arabic with full LTR/RTL support) utilizing an embedded code-first Payload CMS 3 administration panel.
- Built a background worker pipeline (/api/sync-youtube) that monitors YouTube RSS feeds, validates video IDs, and automates scheduled publishing without human intervention.

Icefox — Privacy-Hardened Android Browser | *Kotlin, Android SDK, Mozilla GeckoView Engine*

- Maintained a hardened Android web browser forked from Iceraven / Mozilla Fenix, stripping all cloud account sync, autofill servers, and background telemetry for strict user privacy.

CERTIFICATIONS & TECHNICAL CREDENTIALS

- CCNA (Cisco Certified Network Associate) — Self Learning
- MCSA (Microsoft Certified Solutions Associate) — Self Learning

EDUCATION

Bachelor of Science in Computer Science *(Graduated 2026)* Cairo Higher Institute — New Cairo, Egypt

LANGUAGES

- English: Fluent