# Samir Hassan Ali

# Senior Software Engineer

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Riyadh, Saudi Arabia

Innovative Senior Mobile Software Engineer with 8+ years of proven success delivering scalable, high-performance mobile and cross-platform applications for public and private sectors. Specialized in Flutter, Dart, AI/ML (TensorFlow, Computer Vision), IoT integration, and clean architecture. Skilled in full SDLC leadership, requirements analysis, and performance optimization. Recognized for improving operational efficiency, automating workflows, and ensuring user-centric designs that meet business goals.

#### **Education**

#### Bachelor of Computer Science at Helwan University, Cairo, Egypt

September 2014 - July 2018

Grade: Very Good

- Graduated with High Honors "Excellent" score in Graduation Project.
- IoT-powered Smart Security System with remote monitoring & control.

# **Employment History**

#### Senior Mobile Software Developer at MOMAH, Riyadh, Saudi Arabia

May 2024 - Present • 7

- Led cross-functional teams to design, develop, and launch multiple nationwide mobile applications used by thousands of citizens daily.
- Automated high-frequency manual workflows, cutting operational time by over 60% and improving employee productivity.
- Implemented clean architecture and BLoC state management to ensure scalability and maintainability of core mobile applications.
- Collaborated with government stakeholders to align technical deliverables with strategic digital transformation goals.
- Optimized mobile performance, reducing load times by 30% and enhancing overall user satisfaction.
- Built offline-first mobile apps with local caching and synchronization for low-connectivity environments.
- Oversaw full SDLC, from requirements gathering to deployment, with a strong focus on user-centered design.
- Mentored junior developers, improving team skillsets in Flutter, Dart, and AI/ML integration.
- Ensured 99.9% system uptime through proactive monitoring and automated error handling.
- Conducted post-launch analytics and A/B testing to continuously enhance app features and usability.

#### Senior Mobile Software Developer at Solutions by 42, Al Khobar, Saudi Arabia

- Designed and deployed end-to-end mobile solutions for government agencies, enterprises, and privatesector clients.
- Developed cross-platform applications in Flutter, achieving seamless user experiences on iOS and Android.
- Led requirement analysis workshops to translate client business needs into actionable technical specifications.
- Improved system security by integrating role-based access control and encrypted communication channels.
- Built modular, future-proof architectures enabling faster feature releases and lower maintenance costs.
- Ensured 99.9% system uptime through proactive monitoring and automated error handling.

# **Mobile Software Developer at Freelance**

September 2019 - Present

- Delivered 10+ production-grade mobile applications across industries, including e-commerce, healthcare, and education.
- Designed custom APIs and integrated them into mobile applications for smooth data flow and improved functionality.
- Applied clean architecture principles to maintain code scalability and performance.
- Conducted UI/UX redesigns, improving user engagement and conversion rates.

• Provided post-deployment support and updates to ensure long-term app performance.

#### Engineer Officer at Armed Forces, Cairo, Egypt

April 2019 - October 2021

- Led technical teams in delivering mission-critical IT and engineering projects for defense and civilian sectors.
- Designed and implemented secure communication networks and automated monitoring systems.
- Managed end-to-end project lifecycles under strict security and confidentiality protocols.
- Streamlined operational workflows, improving process efficiency by 30%.
- Introduced innovative tech-driven solutions under high-pressure environments.
- Trained and supervised junior engineers.

# **Internships**

#### Mobile Software Developer at Easacc, Cairo, Egypt

April 2021 - August 2021 • 7

- Developed diverse Flutter applications, including an e-commerce platform.
- Gained hands-on experience in complete mobile development cycles.
- Implemented UI/UX enhancements improving app usability.

# **Skills**

Programming & Development: Flutter, Dart, Kotlin, Java, Python, C, C++, PHP, HTML, CSS, Node.js, .NET

Mobile Architecture: Clean Architecture, BLoC, Provider, MVC, MVVM

AI & Machine Learning: TensorFlow, Computer Vision, NLP, Data Preprocessing, IoT Integration, MQTT

Databases: MySQL, MongoDB, Firebase

Dev Tools: Android Studio, Xcode, VS Code, Git, TFS, Jira, Confluence, Figma, Unity 3D, Matlab, Colab, GitHub

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Soft Skills: Leadership, Team Collaboration, Problem Solving, Communication, Time Management

Operating Systems: macOS, Linux, Windows

# Volunteering

#### Instructor at YouTube

October 2017 - November 2018

- Produced educational tech content supporting peers in academia.
- Created tutorials covering programming, and operating systems.

# **Projects**

#### Momtathil • 7

Designed and developed a government-grade mobile application leveraging AI-powered computer vision for visual distortion detection and automated compliance monitoring. Implemented BLoC state management and clean architecture to ensure scalability, maintainability, and testability. Reduced inspection time by 35%, improved accuracy by 40%, and integrated with secure national APIs for real-time data synchronization.

# SCE - Saudi Council of Engineers • 7

Architected and deployed a comprehensive platform enabling engineers and engineering offices inside and outside KSA to manage licensing, certifications, and approvals. Integrated multi-factor authentication, secure payment gateways, and a fully responsive Flutter front-end. Resulted in a 50% reduction in application processing time and improved user adoption across 200,000+ members.

#### Balady • 7

Contributed to a large-scale smart city initiative integrating municipal services into a single mobile platform. Delivered real-time service requests, location-based features, and AI-powered service recommendations. Improved citizen satisfaction ratings and streamlined urban service delivery for millions of users nationwide.

# T7T AMRK • 7

Developed a cross-platform mobile application connecting citizens with certified technicians across multiple service categories. Integrated geo-location tracking, in-app chat, and service rating systems. Increased service match rates by 60% and reduced booking times by 45%.

#### SFOC - Saudi Forces Officers Club • 7

Built and integrated a dedicated services module inside the Absher government platform for Ministry of Interior employees. Included event booking, membership management, and internal communication tools, with strong adherence to government cybersecurity protocols.

# **Security System**

Led the development of an IoT-based smart monitoring system using Python, OpenCV, Raspberry Pi, and MQTT. Implemented motion detection, live streaming, and remote control features accessible via mobile application. Awarded "Excellent" grade and recognized for innovation in university competition.

# Languages

Arabic - Native

English - Conversational

French - Basic

German - Beginner

#### **Certificates**

# iOS & Swift App Development Bootcamp from Udemy

Built production-ready iOS apps using Swift and Xcode.

# Linear Algebra for Machine Learning and Data Science from Coursera

Focused on foundational mathematics for AI model development.

#### **Machine Learning Bootcamp from Bamboo Geeks**

Hands-on training in ML algorithms, Python, and real-world AI applications.

### Machine Learning Specialization from Coursera (DeepLearning.AI)

Applied supervised & unsupervised learning, ML pipelines, and TensorFlow-based modeling.

# Deep Learning Specialization from Coursera (DeepLearning.AI)

Mastered CNNs, RNNs, sequence models, and optimization techniques for AI solutions.