

Umar Akram

Software Engineer & AI Trainer

Phone: +20 1023651704 **Email:** uamirad00@gmail.com

LinkedIn: linkedin.com/in/umarrakram **GitHub:** github.com/umarrakram

Professional Summary

Results-driven Software Engineer and AI Trainer with expertise in developing SwiftUI-based mobile applications and designing AI-driven educational content. Skilled in Python, C++, mathematics curriculum development, and Arabic language localization. Proven ability to enhance learner engagement and streamline training workflows, combined with a strong background in performance optimization and agile methodologies.

Education

Egypt-Japan University of Science and Technology

Expected June 2026

Bachelor of Science in Computer Science and Information Technology

Alexandria, Egypt

Relevant Coursework: Mobile App Development, Data Structures & Algorithms, Software Engineering, Machine Learning

Technical Skills

- **Languages & Frameworks:** Swift, SwiftUI, Combine, UIKit, Python, C++, Arabic
- **Machine Learning:** Dataset Annotation, Supervised Learning, Model Evaluation
- **AI Training Tools:** Label Studio, Prodigy, Jupyter Notebooks
- **Development Tools:** Xcode, Firebase, Git, Postman
- **Design Patterns:** MVVM, MVC, Clean Architecture
- **Concurrency:** Grand Central Dispatch (GCD), OperationQueue
- **Other Skills:** Agile Methodologies, CI/CD, App Store Deployment, Localization
- **Languages:** Arabic (Native), English (Fluent)

Professional Experience

Outlier

AI Trainer

Remote / Cairo, Egypt

June 2023 – February 2024

- Developed and delivered AI training modules for Outlier's platform, covering mathematics, Python, C++, and Arabic language processing.
- Collaborated with data scientists to refine annotation guidelines, improving dataset quality and reducing labeling errors by 25%.
- Created comprehensive lesson plans and hands-on coding exercises, resulting in a 30% increase in learner engagement and completion rates.
- Conducted one-on-one tutoring sessions and peer review workshops to deepen students' understanding of complex algorithmic concepts.
- Localized technical content in Arabic, ensuring material accessibility and comprehension for MENA region learners.
- Monitored and evaluated student progress using performance metrics, adapting curriculum to address knowledge gaps and optimize learning outcomes.

- Engineered a **SwiftUI**-based social application with real-time notifications, boosting daily active users by 40%.
- Integrated **WebKit** for video streaming, implementing adaptive bitrate optimization to reduce latency by 35%.
- Refactored RESTful APIs using **Vapor**, reducing server response times by 50% through payload caching.
- Designed and developed Axios, an on-device code editor with syntax highlighting and real-time execution, enhancing developer productivity by 25%.
- Supported simple multitasking with a round-robin scheduler and cooperative threading.
- Built custom inter-process communication (IPC) using message queues and shared memory.
- Implemented memory segmentation and paging fundamentals for task isolation.
- Project aimed to provide a modular and extensible core for hobby operating system development.
- Implemented Apple Wallet payments: integrated Apple Pay (PassKit) and StoreKit for one-time and subscription purchases, connected Apple Pay to Stripe for tokenized payments, handled PKPaymentAuthorization flows, receipt validation and server-side verification, improving checkout conversion and reducing payment failures.

Key Projects

Code Editor - Axios

SwiftUI, Combine, WebKit

- Built a code editor with syntax highlighting, auto-completion, and real-time execution using WebKit.
- Developed a custom parser supporting 10+ programming languages with 95% execution accuracy.
- Integrated GitHub API for version control and collaboration.

WeatherSnap - Forecast App

SwiftUI, Combine, Core Location

- Integrated OpenWeatherMap API with Combine for reactive data flow.
- Implemented GPS-based forecasts using Core Location with 98% accuracy.
- Designed animated weather transitions using Lottie for enhanced user experience.

Achievements

- Published two iOS applications on the App Store, achieving an average rating of 4.4/5 and over 100,000 downloads.
- Reduced memory leaks by 40% using Xcode Instruments and Combine.
- Led Agile sprints, delivering features 15% ahead of deadlines.