# MOHAMED MOUBARAK

## **Product-Minded Mobile Engineer**

@ mohd.moubarak@gmail.com

@ github.com/moubarak

♥ Beirut, Lebanon (EET) / Istanbul, Turkiye

#### **EXPERIENCE**

## Senior Mobile Engineer

#### Dyneti (YC 19)

## 2023 - 2024 ♀ Remote with San Francisco

@ dvneti.com

- Owned Dyneti's iOS, Android, and React-Native SDKs
- Built several pilots that resulted in major customer acquisitions, almost doubling Dyneti in size
- Architected an Al camera pipeline supporting over 98% of existing Android devices and improved real-time memory consumption by ~80%
- Provided direct support to customers
- Worked closely with Al engineers and provided iOS mentoring

## Senior Android Engineer

#### Daily (YC 16)

**=** 2021 - 2022

Remote with San Francisco

@ daily.co

- Owned, built, maintained, and released Daily's Android WebRTC SDK, which is a thin layer on top of a common Rust core
- Used the latest kotlinx serialization library to communicate with the lower Rust layer, in close collaboration with the iOS and Rust teams
- Engineered the build process of compiling the Rust core along with other c++ dependencies into Android Studio using gradle, cbindgen, and cmake scripts
- Implemented an Android Clubhouse clone, which resulted in multiple customer acquisitions
- Proactively implemented user-facing APIs to accommodate developers coming from Java, idiomatic Kotlin developers, and early adopters of new Kotlin features
- Documented my work in Notion and made sure stakeholders are always informed

## Senior iOS Engineer

#### Occipital (Techstars)

@ canvas.io

- Took ownership of building, releasing, and maintaining Canvas, which became a seven-figure business in three years
- Re-architected networking and Core Data persistence between the backend and Canvas to achieve efficient large-file uploads and downloads via Amazon S3
- Implemented custom designed Sketch illustrations for both iPad and
- Proactively implemented tools to optimize app size and design hand-off
- Built **TapMeasure** from scratch and remotely lead the iOS team while collaborating with the design and computer vision teams

#### Digital Skills Instructor

#### **UN World Food Program**

Ø innovation.wfp.org/project/empact

· Taught classes that empower refugees to find remote work

## **ACHIEVEMENTS**



#### **Apple Event October 2020**

Apple showcased Canvas when launching the iPhone 12 Pro with LiDAR



#### **Featured App & Best Developer**

TapMeasure was featured under AR Apps We Love in the App Store and made the App Store's Best of 2017 Developers list



#### **Top Paid Apps**

TapMeasure ranked as the Top Paid AR app in the App Store. Cycloramic ranked as the Top Paid app in All Categories in the App Store



## One Million Downloads

Crossed one million downloads on Google Play with my free android camera



#### **Master's in Computer Science**

Thesis on wireless sensor operating systems with multiple publications

## **SKILLS**

Kotlin Java **Swift** ObjectiveC++ **OpenCV** Core ML MediaPipe **TensorFlow Lite** ML Kit

## **LANGUAGES**

<b>English</b> Native	•	•	•	•	•	)
Arabic Native	 •	•	•	•	•	)

## **EXPERIENCE**

## Mobile Engineer

#### **Spin Master**

@ spinmaster.com

- · Prototyped computer vision applications for kids products
- Built data generation tools for AI training to help detect stationaryto-walking on a VR headset
- Created a library to stream video to a VR headset using RTSP
- · Implemented real-time object tracking on iOS using dlib

## Mobile Engineer

#### Chariot (YC W15), acquired by Ford

@ tcrn.ch/2c3U7iJ

 Ported the Chariot iOS app to Android from scratch, helping provide San Francisco with more than 3 million rides

## Mobile Engineer

#### Cycloramic, acquired by Carvana

② en.wikipedia.org/wiki/Cycloramic

- · Closed a deal to power Cycloramic using my library
- Led a remote team of interns to port the app to Windows Phone on a strict deadline

#### Co-Founder

#### Radcam

- · Learned iOS and Android mobile development
- · Led Maryland based startup from zero to income in a few months
- · Implemented a low-level library to stitch photos from a video stream
- Built the first app to capture wide angle photos from the front camera

## **PROJECTS**

## Observant AI (YC 18)

@ observantai.com

5 month contract

- Built real-time driver distraction detection later deployed in autonomous fleets throughout the US, brining AV safety closer to reality
- Applied sensor fusion to increase accuracy by 500%
- Built a rendering pipeline using SceneKit for visual debugging
- Trained a real-time drinking detector using Create ML and Core ML

## Dubsmash, acquired by Reddit

@ reddit.com

Take-home test

- Implemented a Dubsmash clone on macOS
- Implemented real-time facial-feature tracking on iOS
- Worked on improving OpenCV to dlib raw data bridging from O(n) to O(1)

## Cruise (YC 14), acquired by GM

@ getcruise.com

Take-home test

- Implemented real-time lane detection in actual video footage using C++ and OpenCV
- Improved the robustness of my algorithm by implementing three-step fallback