

Markos Zoulias Charatzas - markos@qnoid.com

Software Engineer in iOS/macOS apps and Java Enterprise (20 years of experience)

BSc (Hons) Information Technology - University of Sunderland (2003)

Profile - <https://github.com/qnoid/>

I have been able to upskill, re-train, evolve, grow and adapt to the technological changes that the last 20 years have brought in the tech industry. I started as a Java Enterprise Web Developer back when I had to provision infrastructure and be a system administrator. Soon after the iPhone was announced, I took an online Stanford Course on iPhone Application Development and became well-versed in Cloud computing.

The technological change that generative artificial intelligence brings requires you to have experienced, skilled, well-rounded software engineers who possess a deeper understanding of how software works. You need experts who know how to operate AI agents to produce and deploy code with high confidence and a low risk of failure that could otherwise prove costly to your business.

Professional Experience - <https://www.linkedin.com/in/qnoid/>

iOS Developer

Jun24 - Apr25

Affected by layoffs

Medable

(Remote, UK)

www.medable.com

swift, swiftui, combine, copilot, generative AI, objective-c

Core developer on the Medable iPhone app; used by mid-large Pharma to run clinical trials.

- * Implemented a SwiftUI view to enter a code, one digit at the time, delete and support paste.
- * Debugged and fixed a number of retain cycles in that were causing an invalid tabbar layout.
- * Worked on a large, unfamiliar, complex codebase across objective-c/swift and UIKit/SwiftUI.

iOS Developer

Jan23 - Dec23

Capital One

(London, UK)

www.capitalone.co.uk

swift, combine, web sockets, technical lead

Lead developer on the Capital One iPhone app; a mobile banking app.

- * Implemented a real time chat feature, in UIKit, combining REST calls and web sockets.
 - * Implemented an algorithm to ensure no data loss, no duplicate messages, ordering.
- * Implemented support to retry a message in case of a send failure due to a network error.
- * Debugged, traced and fixed an issue in closed source code using lldb, frames and registers.
- * Lead architectural decisions across the mobile app and the backend services.
- * Mentored junior/graduates that were part of the core team.

Mac Developer

Aug22 - Oct22

Affected by layoffs

Sketch

(Remote, UK)

www.sketch.com

swift, appkit, graphql, instruments, profiler, memory

Core developer on the Apple Design Award-winning Mac app for designers.

- * Solved a performance issue that had a severe impact on the rendering of a tree document.
- * Solved a memory leak on a critical production issue as the cause of an unbounded growth of sockets

Technical Lead

Mar18 - July22

KodyPay

(Remote, UK)

www.kodipay.com

kotlin, co-routines, vert.x, graphql, rbms, docker, payments

No. 2 engineer, direct report to the CTO, on a retail, ordering, payments app.

- * Technical Lead on a platform of 6 codebases
- * Technical Architect on how to process payments and implement 3DS transactions
- * Provisioned a continuous delivery pipeline that supported 4 platforms (Web, iOS, Android, Backend), 2 languages (Angular, Kotlin), related tooling, integrations (GitHub, VPN, AWS, AppCenter), environments (development, staging, production), topologies.
- * Created and ran a rigorous, 2 stage hiring process for multiple disciplines (Web, Mobile, Backend, QA, DevOps) that resulted in a team of 14 engineers with high retention rate and great culture fit.

Founder

Feb18 - Jan20

Windmill

<https://windmill.qnoid.com>

swift, appkit, cloudkit, storekit, java enterprise, rbms, aws

Solo engineer of a continuous delivery platform for iPhone apps, built from the ground up.

- * Windmill on the Mac is a native macOS application written in Swift 5 on Xcode 10 targeting macOS 10.14. The codebase is about 16k LOC. <https://github.com/qnoid/windmill-osx>
- * Windmill on the iPhone is a native iOS app written in Swift 5 on Xcode 10 targeting iOS 12.2. The codebase is about 5k LOC. <https://github.com/qnoid/windmill-ios>
- * The Windmill REST API is a Java EE 8 implementation written in Java 8 using JAX-RS. The codebase is about 7.5k LOC. <https://github.com/qnoid/windmill-api>
- * Deployment on AWS using EC2, RDS and S3 to manage distribution of iOS apps.

iOS Developer

Feb17 - Jun17

Aludio
(London, UK)

Head of Mobile

Sep15 - Oct16

Soldo
(London, UK)
www.soldo.com

iOS Developer

Oct13 - Mar15

Tesco Bank
(Edinburgh, UK)
www.tescobank.com

iOS Developer

Jun11 - Sep13

NCR (Edinburgh, UK)

Java Developer

Jun10 - Mar11
Fixed Contract

Helixion
(Edinburgh, UK)
www.helixion.com

Java Developer

Jun09 - Aug09

24 Media
(Athens, Greece)
www.24media.gr

Java Developer

Oct03 - May07

Forthnet S.A.
(Crete, Greece)
www.forthnet.gr

Java Developer

Nov01 - Sep02

CERN
(Geneva, Switzerland)
<http://www.cern.ch>

swift, mvvm, rest api

No. 3 hire, direct report to the Head of Engineering and CEO, on a booking, payments app.

- * Core developer on the ACORN MVP iOS app.
- * Lead the project delivery of the ACORN MVP iOS app.

swift, rest api, payments

Spearheaded the development of Soldo - The Family Spending Account on the iPhone.

- * Performed a 2 day training to introduce agile practices to product and development teams.
- * Setup Xcode bots to use as a continuous integration/delivery pipeline for releases.
- * Planned a hiring process, conducted technical and cultural fit interviews to recruit mobile developers.
- * Directly managed 2 developers, established work responsibilities and steered culture.

objective-c, swift, rest api, technical lead, mobile banking

Responsible for the technical delivery of Tesco Bank Mobile Banking on the iPhone.

- * Implemented code to check for outdated security policies, download and run security checks.
- * Implemented lazy, dynamic grouping of partial data fetched over the network for a table view.
- * Setup CI from the ground up using Jenkins integrated with Bitbucket to make nightly builds available via an Apache Web Server.
- * Devised a strategy to securely deliver an iPhone app over-the-air for up to 1500 users using AWS.
- * Advising senior management on development practices, testing strategies and risk mitigation on project deliveries.
- * Planned a hiring process, conducted technical and cultural fit interviews to recruit iOS developers

objective-c, technical lead, mobile banking

* Technical Lead on a project of 3 code bases (iPhone, Android, JEE) and responsible for 4 people.

- * Involved in documenting development processes and software design.
- * Developed an endless scrolling, in memory, table view for paging data over the network.
- * Developed a role based, feature availability for an iPhone app that is server driven.
- * Developed a maven plugin for automating blackberry builds (sign, verify)

java enterprise, api design, javacard, rdbms, xml, payments

* Designed and developed an API to perform authentication, exchange and validate messages with a socket server

- * Designed and developed a logging API supporting the idea of rules, streams and formatters (XML focused)
- * Designed and developed an API for emulating a terminal reader as a state machine

java enterprise, jpa, rest api, json, jsp el

- * Developed a football manager web application.
- * Leading a Junior to develop a live reporting web application for journalists.
- * Initiative to setup automated tests and dependency management.

java enterprise, struts, hibernate, axis soap, velocity, digester

- * Core developer for Enosis - <http://www.enosis.gr>
- * Core developer for OpenSeas - <http://www.openseas.gr>
- * Developed a web service for OpenSeas

java enterprise, xml, sql, rdbms

- * Core developer of an online search engine for EDH
- * Developed a J2SE application to migrate an Oracle database

Speaker - <https://www.youtube.com/@qnoid>

- * NSLondon Group, "Debugging Closed Source Code", London, UK. <https://www.youtube.com/watch?v=p60VcwlvwY8>
- * Athens iOS Meetup Group, "iOS Release Pipeline", Athens, Greece. <https://www.youtube.com/watch?v=1Vbn7vd7EWY>
- * iOS Conf, "Memory and CPU Profiling", Athens, Greece. <https://www.youtube.com/watch?v=lyNHJOsAxIs>
- * The Highland Fling, "I product, 3 years, one shipment (a true story) ", Edinburgh, UK. <https://www.youtube.com/watch?v=hWltBs5wCI4>
- * NSConference 6, "Sound Debugging", Leicester, UK. <https://www.youtube.com/watch?v=rMtGcLLYldw>
- * NSConference 5, "User Identity", Leicester, UK. <https://www.youtube.com/watch?v=osdDy7X0n78>
- * JCrete '07, "Object Oriented Programming", University of Crete. <https://vimeo.com/manage/videos/10550416>

Popular Posts

- * How to replace the `rootViewController` of the `UIWindow` in iOS, https://qnoid.com/2019/02/15/How_to_replace_the_rootViewController_of_the_UIWindow_in_iOS.html#main
- * A primer in HTTP caching and its native support by iOS, <https://qnoid.com/2016/04/10/A-primer-in-HTTP-caching-and-its-native-support-by-iOS.html#main>
- * A series of steps, <https://qnoid.com/2019/05/07/A-series-of-steps.html#main>
- * Sound Debugging, <https://qnoid.com/2013/06/08/Sound-Debugging.html#main>

Education

2009 - 2010 Winter

CS 193P iPhone Application Development

Stanford University
(iTunes U)

cs193p.sites.stanford.edu/

May06

JAVA 5 DELTA & JAVA PATTERNS COMBO COURSE

Javaspecialists
(Chania, Crete)

www.javaspecialists.eu/

Class of 2003

BACHELOR (IN SCIENCE) INFORMATION TECHNOLOGY

University of Sunderland
(Sunderland, UK)

www.sunderland.ac.uk/

Projects

windmill

Feb18 - Jan20

Windmill provides in-house continuous delivery for iPhone apps. It is a platform made up of a macOS and an iPhone app supported by a REST API written in Java EE, running on AWS. The Windmill source code has since been made public and is available at <https://github.com/qnoid>

<https://windmill.qnoid.com/>

verylargebox

Oct10 - Mar13

<https://github.com/qnoid/verylargebox>

verylargebox was a retail app that enabled local shops to have an online presence and reach out to customers on their iPhone. The app was written in Objective-C with the backend written in Ruby on Rails running on Heroku. Even though it was released on the App Store, it became apparent I had to raise money and go down the startup route. I made the decision not to go down that path which lead to its shutdown.

- * Developed an iPhone app that spawn 3 open source libraries (VLBCameraView, VLBScrollView, VLBAAlertViews) and introduced a way to authenticate a user without the need of a password (VLBUserIdentity).
- * Learned Ruby on Rails to build a REST API deployed on Heroku.
- * Implemented an architecture to store photos on AWS directly from the app, ping the server on Heroku to resize and store.
- * Optimised AWS and Heroku regions for low latency and fast transfers.
- * Monitored and optimised web and database transactions using New Relic.
- * Setup a mail service using Mandrill for user registrations.