

Markos Zoulias Charatzas

Software Engineer, experienced in iOS/macOS apps and Java Enterprise
BSc (Hons) Information Technology - University of Sunderland (2003)

Profile

I have 10 years of experience as an Apple Developer and 10 years as a Java Enterprise Developer. I have been developing software professionally since 2001 when I was offered a role at CERN as part of their Technical Student Programme. I proceeded to become a Java Enterprise Developer and got to grips with servers, *nix systems, databases, services and the JVM.

In 2009, on the dawn of the App Store, I took the plunge in becoming an iPhone developer. I attended the Stanford CS 193P course on iPhone Application Development. Four years later, in 2013, I released verylargebox on the App Store. A retail app that enabled local shops to have an online presence and reach out to customers on their iPhone. That same year I asked developers to reconsider the use of passwords. I gave that talk at NSConf right after Evan Doll, the man who taught the iPhone course at Stanford. The next year I returned to showcase how using sound patterns can help visualise code execution on an unfamiliar codebase and identify defects.

In 2018, I announced Windmill, a continuous delivery platform spanning across 3 platforms (iOS, macOS, Backend), 2 languages (Java, Swift). Windmill was the culmination of all the experience I have accumulated as a software engineer over the years. It took an enormous amount of effort, research and development to bring it to life. Paying great attention to the user experience while taking care of security and privacy.

Professional Experience

iOS Developer

Jan23 - Dec23 (1 year)

Capital One (London, UK)
www.capitalonecareers.com

swift, combine, web sockets, technical lead

- * Lead developer on the Capital One iPhone app
- * Lead architectural decisions across the mobile app and the backend services.
- * Mentored junior/graduates as part of the core team

Mac Developer

Aug22 - Oct22 (3 m)

Sketch (Remote, UK)
www.sketch.com

swift, appkit, graphql, instruments, profiler, memory

Affected by layoffs alongside 80 people (~35% of the workforce)

<https://www.linkedin.com/feed/update/urn:li:activity:6985543891869429760>

- * Worked on the Apple Design Award-winning Mac app.
- * 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

Mar21 - July22 (1 year, 5m)

KodyPay (Remote, UK)
www.kodypay.com

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

- * No. 2 engineering hire, brought on board by the CTO and COO at the time.
- * 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 (2 years)
Windmill

<https://windmill.qnoid.com>

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

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>

iOS Developer

Feb17 - Jun17 (5m)

Aludio (London, UK)

swift, mvvm, rest api

- * No. 3 hire, brought on board by the Head of Engineering and CEO.
- * Lead the project delivery of the ACORN MVP iOS app.

Head of Mobile

Sep15 - Oct16 (1 year, 2m)

Soldo (London, UK)

www.soldo.com

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.

iOS Developer

Oct13 - Mar15 (1 year, 6m)

Tesco Bank (Edinburgh, UK)

www.tescobank.com

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

iOS Developer

Jun11 - Sep13 (2 years, 4m)

NCR (Edinburgh, UK)

objective-c, technical lead, mobile banking

- * Core developer in 2 iPhone and 1 iPad app with a client/server architecture
- * Technical Lead on a project of 3 code bases (iPhone, Android, JEE) and responsible for 4 people.
- * Involved in all aspects of the software process (wireframe, design, development, build, release)
- * 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.
- * Devised a strategy to convert an existing iPhone code base to universal.
- * Developed a maven plugin for automating blackberry builds (sign, verify)

Java Developer

Jun10 - Mar11 (10 months)
Fixed Contract

Helixion (Edinburgh, UK)

www.helixion.com

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 a database schema and related CRUD API
- * Designed and developed an API for emulating a terminal reader as a state machine
- * Designed and developed a web app for parsing and viewing xml logs

Java Developer

Jun09 - Aug09 (3 months)

24 Media (Athens, Greece)

www.24media.gr

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 Developer

Oct03 - May07 (3 years 8m)

Forthnet S.A. (Crete, Greece)

www.forthnet.gr

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
- * Developed a web service to return weather data
- * Developed a CMS which drives a departures/arrivals screen for the Heraklion Port Authority

Java Developer

Nov01 - Sep02 (11 months)

CERN (Geneva, Switzerland)

<http://www.cern.ch>

java enterprise, xml, sql, rdbms

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

Speaker

- * 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, "1 product, 3 years, one shipment (a true story)", Edinburgh, UK. <https://www.youtube.com/watch?v=hWltBs5wCl4>
- * 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)
<https://cs193p.sites.stanford.edu/>

May06

JAVA 5 DELTA & JAVA PATTERNS COMBO COURSE

Javaspecialists (Chania, Crete)
<http://www.javaspecialists.eu/>

Class of 2003

BACHELOR (IN SCIENCE) INFORMATION TECHNOLOGY

University of Sunderland
(Sunderland, UK)
<https://www.sunderland.ac.uk/>

Projects

windmill
Feb18 - Jan20

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

- * 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.

verylargebox
Oct10 - Mar13

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

- * Developed an MVP, pushed out, evaluated feedback, iterated.
- * Recruited testers to run user tests via Testflight.
- * Recruited a designer to work on the visual style of the app and website.
- * Recruited a film company and coordinated with, to create a promotional video for the launch.
- * 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.