

ALEXANDROS ARGYRIOU, 29Y

Sr. Software Engineer BEng, MSIS

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SUMMARY

Innovative and full of ideas. Knowledge hunter with **software passion**. In love with **code creation** and **reverse engineering processes**. Self-motivated **problem solver**, with strong analytical skills, armed with an **in-depth experience on a plethora of cutting edge technologies**. Apart from being involved with software, I love hiking and cycling in my spare time.

EDUCATION

Technological Educational Institute of Western Macedonia

2014 – 2020

– BEng, Informatics Engineering

Kastoria, Greece

– **Bachelor Thesis - Hybrid binary voxel map compression** based on volume subdivision and run length encoding, without power of 2 limitations. A C++ approach. [\[http\]](#)

Neapolis University

2021 – 2022

– MSIS, Master of Science in Information Systems

Pafos, Cyprus

– **Master Thesis - Analysis, design and implementation of an enterprise investment decision support system in the cryptocurrency market**, based on **time-series forecasting** and **auto-arima models**. [\[http\]](#)

EXPERIENCE

Vodafone

Dec. 2023 – Present

Senior Software Engineer

Athens, Greece

↑

Jul. 2022 – Dec. 2023

Software Engineer

Athens, Greece

- Built from scratch & maintain the new **e-comm platform** for Vodafone Greece. [\[http\]](#)
- Main stack includes **Microservices, Jenkins, Spring boot, Quarkus, Docker, Solr, AWS, Kubernetes, Kafka, PostgreSQL, Swagger, Opensearch, ArgoCD**.
- Temporary **lead** the back-end chapter with full responsibility for the development and implementation of the new e-commerce platform. (on chapter lead absence).
- On chapter's behalf presented our way of working with **reactive programming** using **spring & webflux** on Devstaff 2023 meeting. [\[http\]](#)
- Supported & Embraced the decision of using **Quarkus** as our middleware java technology, while explained thoroughly the advantages of **compile time augmentation** vs. **runtime loading** especially on **cloud environments**. [\[http\]](#)
- Changed the whole development flow from **git-flow** to **Scaled Trunk Based Development [STBD]** embracing **CI/CD** not just **I/D**. [\[http\]](#)
- Presented a **poc** in order to demonstrate **fully automated CI/CD** with **github actions** [\[http\]](#). Migrated a huge part of the **old jenkins stack onto github's integrated CI/CD platform** for vodafone's ecommerce pipeline.
- Implemented various parts of the new e-commerce **cloud infra** while emphasizing devops skills on **aws/eks** cluster.
- Provided **continuous knowledge transfer** with **perpetual training** and **mentoring** on junior individuals.
- **Documented** the whole project using **swagger**.
- Created a poc focusing on **OpenTelemetry** usage for Microservices tracing using **splunk otel/agent** for **log/tracing integration**. [\[http\]](#)
- Created various **sql triggers** in order to **automate DB processes** upon **CRUD ops**, such as **virtual table (view) generation**.
- **Integrated solr with aws Opensearch** in order to provide indexing and searching on a general cluster [document db] available for multiple organization clients. [\[http\]](#)

- Demonstrated and implemented a **local aws way of development** using **localstack aws mock** and k8s cluster. [\[http\]](#)
- Implemented an **aspect oriented solution**, abusing **reflection idiom** to demonstrate **internal spring boot aspects** on the new commerce team. [\[http\]](#)
- Presented a demonstration on **how to build your own annotation based web framework using plain Java**, called **Virtual Octopus Server**.[\[http\]](#)
- **Interviewed** and **trained** junior/mid developers.

P&I AG

Software Engineer

Dec. 2020 – Jul. 2022

Ioannina, Greece/Wiesbaden, Germany

- Part of the **payroll engine team**. Developed and maintained various parts of a **multi-million revenue product** using technologies like **Java EE, Maven, Drools, Wildfly, Jenkins, Git, Oracle & Postgre SQL**.
- Multi role player. Part of payroll's abstractions team. Developed various **containerized APIs** in order to expose engine's power on any client/project which is interested in it. Mainly use of **Spring Boot** alongside **Spring Rest, Spring HATEOAS & Docker**.
- Fully developed 2 sub-projects on my own initiative, to make my team's life easier while interacting with legacy code and binary files.
 - * An **IntelliJ plugin** [\[http\]](#), using Java & Gradle which keeps my teammates safe when they want to commit on an older cvs branch, with outdated binary files.
 - * An **.xls searcher** [\[http\]](#), using Java and Apache POI library, to keep the search process through business rules in excel files, as simple as possible for everyone.
- Responsible for every **new implementation and major refactor** in collective agreements according to law amendments, while trying to comply with proper **oop design patterns**, in order to keep the engine scalable.
- Parametrizing and utilizing **Jenkins** to provide a continuous integration service in order to automate the entire process of loading the latest build.
- Working on both windows & **linux** environments. keeping my code-base up to date using a variety of version control systems, mainly **git**, but also **svn** and **cvs** to update older products.

Hellenic Army

Software Engineer

Oct. 2019 – Jul. 2020

Evros, Greece

- Provided assistance in software optimization and maintenance of **army's drones micro-controllers in C/C++**, while I was learning interesting networking stuff from my supervisors.
- Developed a **fully functional Qt/C++ desktop application** [\[http\]](#) for military-files handling, to reduce the searching complexity of valuable information in raw documents.
- Responsible for crucial small parts of **script optimization**, in order to automate the transformation process of income messages in a private network into .xls data.
- Undertook communication systems operator training.
- **Honored by army general with an excellent service award.**

Dixons Carphone

Electronic Engineer Intern

Nov. 2017 – Apr. 2018

Ioannina, Greece

- Main responsibilities constituted of detecting and solving various problems on electronic devices. Focused on hardware domain, especially on **chipset, motherboard and graphic cards** restoration.
- Tracked and saved data relevant to restored products on a **unix cli** based application.
- Performed an **administration role on a unix cli based supply information system**.

TECHNICAL SKILLS

→ **Very comfortable (Proficient) with:** C, C++, Java, SQL

→ **Familiar with:** Python, JavaScript, PHP, Ruby, Go

→ **Tehnologies/Frameworks/Tools:** AWS, k8s, Git, Github, Gitlab, Java EE, Spring, Srping Boot, Quarkus, Qt, CMake, Maven, Gradle, Jenkins, Postgre SQL, Oracle DB.

→ **preferable OS:** Linux

CERTIFICATES

→ Java & Spring Academy (120hrs) – Athens Tech College. [\[http\]](#)

→ Developing on AWS. [\[http\]](#)

PROJECTS

→ **G. Actions CI/CD** with version auto bump [\[http\]](#)

→ **Compile time augmentation** vs Runtime loading. [\[http\]](#)

→ **Spring AI** api for image generation. [\[http\]](#)

→ Mock AWS development using localstack mock aws with k8s [\[http\]](#)

→ Virtual Octopus Custom **DI Framework**. [\[http\]](#)

→ **High Performance parallel algorithm** implementation, for hyperthreading investigation [\[http\]](#)

→ **Fully Responsive crypto calculation Spring Boot REST API** [\[http\]](#)

→ A **Java Simulation** on how an **Application proxy server works**, while abusing reflection's power. [\[http\]](#)

→ **AI sentiment analysis** and NLP(natural language process) project for over 6.000 "live" tweets about COVID-19 through Twitter's API. [\[http\]](#)

→ Co-Developed a **full-Stack application to manage property repair entries in a civil engineering office** using Spring, Bootstrap & MS SQL Server. [\[http\]](#)

→ (AI/ML) **Decision Tree implementation in C++** using CART(Classification And Regression Trees) supervised learning algorithm. [\[http\]](#)

→ **Perceptron Neural Network for "Object" separation**. [\[http\]](#)

→ A **mini sorting "library"**, C++ approach, using the fastest sorting algorithms compared by sorting speed, in both **parallel and serial** "environments". [\[http\]](#)

→ **C++/WinRT AI/ML Computer Vision Project** for object detection through Window's AI APIs and **SqueezeNet pre-trained deep neural network**. (C++ Console Application) / (Gui deployed in Qt/C++). [\[http\]](#)

→ **Simple TCP Server & Client Implementation** in C++/Boost, Java. [\[http\]](#)

→ **Voice Commands**, Recognition and Reply (C#.NET GUI application). [\[http\]](#)

→ A **Modern Shopping Cart** using html, php, bootstrap css framework, and XAMPP. [\[http\]](#)

→ Minimal web application for **real time multi-object recognition and detection through ml5.js** machine learning API and coco-ssd pre-trained model. [\[http\]](#)

→ Simple **voice translator** app in python alongside IBM's Watson AI light versions for NLP. [\[http\]](#)

→ AI/ML C++ Implementation of **k-nearest neighbors supervised learning algorithm**. [\[http\]](#)

LANGUAGES

- Greek, (**native**)
- English, (**C2 Proficient**)
- German, **Basic communication** (Through work learning)