

# ALEXANDROS ARGYRIOU, 26y

Software Engineer BEng, MSIS

25th Martiou 24 Pedini, Ioannina 45500

+30 6979304819 [✉ alexander.k.argyriou@gmail.com](mailto:alexander.k.argyriou@gmail.com) [in alexander-argyriou](https://www.linkedin.com/in/alexander-argyriou) [GitHub AlexanderArgyriou](https://github.com/AlexanderArgyriou) [Bio](#)

## 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. Aiming to be a useful part of the software universe. 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

### P&I AG

Dec. 2020 – Present

Software Engineer

Ioannina, Greece/Wiesbaden, Germany

- Part of the payroll engine team. Developing and maintaining various parts of a multi-million revenue product using technologies like Java EE, Maven, Drools, Wildfly, Jenkins, Git, Oracle & PostgreSQL.
- Multi role player. Part of payroll's abstractions team. Developing 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[\[http\]](#), using Java & Gradle which keeps my teammates safe when they want to commit on an older cvs branch, with outdated binary files.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

Oct. 2019 – Jul. 2020

Software Engineer

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.

- 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.

## PROJECTS

---

→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. [\[http\]](#)

## CERTIFICATES

---

→Java & Spring Academy (120hrs) – Athens Tech College.

## TECHNICAL SKILLS

---

**Very comfortable with:** C, C++, Java, SQL

**Familiar with:** Python, JavaScript, PHP

**Developer IDE:** Visual Studio, IntelliJ

**Technologies/Frameworks:** Java EE, Spring, Qt, CMake, Maven, Jenkins, Git, Postgre SQL, Oracle DB

**preferable OS:** Linux, Windows

## LANGUAGES

---

- Greek, (native)
- English, (B2)
- German, Basic communication (Through work learning)