

Name: Alexander Argyriou, 25  
Profession: Computer Engineer, MSc(c)  
Address: 25<sup>th</sup> Martiou 24, Pedini, Ioannina, Greece, 45500  
Phone: +30-6979304819  
E-mail: [Alexander.k.Argyriou@gmail.com](mailto:Alexander.k.Argyriou@gmail.com)

---

## SUMMARY

---

Computer engineer with passion for software development through flawless source code. Information systems enthusiast, currently working with spring framework and JavaEE. Machine Learning Algorithms explorer, who loves to code AI/ML algorithmic projects from scratch in C++ or with higher abstraction in Python.

---

## COMPUTER SKILLS

---

### Languages

- **Proficient in:** C, C++, Java, Python.
- **Familiar with:** C#, JavaScript, PHP, SQL.
- **New to:** Go, Rust, Swift.

### Software

- **Database/Server:** MySQL, SQL Server, MongoDB, Apache, Xampp.
- **Framework:** Qt/C++, JavaFX, Java/Spring, C#.NET.
- **IDE:** Visual Studio, NetBeans, Eclipse, Spyder, IntelliJ.
- **Web Development Technologies(Stack):** html/css/JavaScript, jQuery, Bootstrap Java/Spring, Node.js, PHP/OOPHP, Atom, VS Code, WAMP.
- **AI/ML/DL, Big Data Technologies(Python):** IBM Watson, scikit-learn, Keras, TensorFlow, Hadoop, Spark, NoSQL.

### Data Structures / Algorithms

- Strong and in-depth knowledge of the most common algorithms in many fundamental computer science fields.
- Solid Knowledge of 2D and 3D Image Compression. Proficient in Hybrid Quadtrees/Octrees & RLE algorithms and Hybrid Quadtrees/Octrees & B+ Trees algorithms.
- Good Knowledge of AI/ML concepts based primarily on Decision trees, Decision forests, Random forests and Neural Networks.

### Other

- Object Oriented Analysis and Design.
- Algorithm Analysis and Design.
- AI/ML Applications Analysis and Design.

- Good Knowledge about Cloud Technologies and Architectures.
- Solid Knowledge of Object Oriented Patterns.
- Good knowledge about NLP(Natural Language Processing).

---

## EXPERIENCE

---

### **Software Engineer**, (present).

*P&I AG*

- Analyzing & improving payroll engine functionality with Java & Drools.

### **Software Developer & Battle Zone Communications System Operator**, 8 months.

*Hellenic Army*

- Detecting bugs and improving the existing code for Hellenic Drones in C#.Net environment.
- Designed, developed and deployed a cross-platform graphical user interface in Qt/C++ for military files handling.

### **Computer Technician(internship)**, 6 months.

*Dixons(SE.E.)*

- Detecting and solving software/hardware related problems.

---

## CERTIFICATIONS

---

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

---

## EDUCATION

---

### **Neapolis University,**

**School of Economics, Business & Computer Science,**

**Department of Computer Science.**

*Pafos, Cyprus.*

- **MSc(Diploma)** candidate - Information Systems & Digital Innovation. (1,5 years, 90 ECTS)

### **University of Western Macedonia,**

**School of Sciences,**

**Department of Informatics.**

(Study program offered by Technological Institute of Western Macedonia.)

*Kastoria, Western Macedonia, Greece.*

- **BSc(Ptychion)** - Informatics Engineering, focused on Computer Engineering. (4 years, 240 ECTS)
- **BSc Thesis** - Hybrid binary voxel map compression based on volume subdivision and run length encoding, without power of

2 limitations (C++ approach). [[http](#) or [E-mail](#) or [Drive](#)].

- Degree obtained.

---

## LANGUAGES

---

- **Hellenic** (Native)
  - **English** (B2)
- 

## PROJECTS

---

- AI sentiment analysis and NLP(natural language process) project for over 6.000 "live" tweets about COVID-19. [[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](#)].
- File Handling graphical user interface application, written in Qt/C++, for "local", temporary and fast usage from army's computers. [[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, OOPHP, 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 with IBM's Watson AI light versions for NLP. [[http](#)].
- AI/ML C++ Implementation of k-nearest neighbors supervised learning algorithm. [[http](#)].