

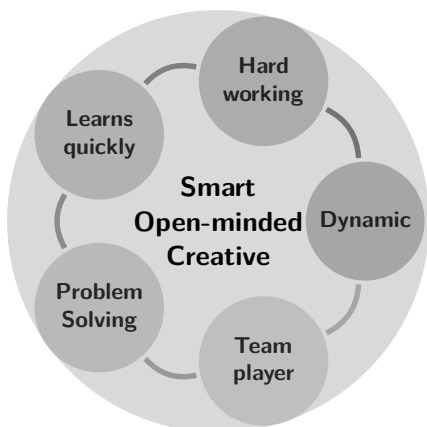
Vasileios-Athanasios Anagnostopoulos

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🌐 www.anagno.me

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in [vanagnos](#)



- Inherently curious with well developed **logical, mathematical skills**.
- Proficient in **C++**, **CMake**, **Conan** Package Manager, **Boost**, **Qt** and **OpenCV**.
- Experience in developing **Embedded Linux** distros using **Yocto**.
- Experience in developing **Rust** applications.
- Used **Docker**, **Podman** containers to quickly deploy **Linux** based applications.
- Experience in developing and maintaining **CI/CD** infrastructure.
- Experience in programming web geo-applications using **Geoserver**, **OpenLayers**, **HTML5/JS** and **open web service standards (OGC WMS, WFS)**.
- Solid understanding of **2D and 3D modeling techniques** and **computer vision**.

Experience

Mar. 2022 – **Full Stack IoT Engineer for Embedded Linux**, SIEMENS SCHWEIZ AG,
Current Züg, Switzerland

Software Engineer at Siemens Smart Infrastructure, where I develop/maintain the existing source code using **C++20 and Yocto**. Specifically:

- I develop software for edge devices for building automation systems. The devices are **Linux** based, mainly on ARM-based processors and the software is written in various languages such as **C++20, Rust, Go and Python**.
- I contribute and maintain the internal **Yocto Layers** of our Linux distribution that is deployed to the devices.
- I conducted a variant analysis to replace the **Docker** container runtime in the embedded devices. The replacement was necessary, because Docker does not support **IPv6** and there are license complication with Docker. Multiple variant were consider such as k3s and podman and the results demonstrated that Podman is the most suitable container runtime for embedded devices.
- I implemented the replacement of the Docker container runtime with Podman.
- I develop **unit and integration tests** that automatically test the functionality of the devices. The tests are end to end from the edge device to the cloud and they are developed using Python.
- I implement **performance tests** to monitor the CPU/Memory usage of the devices. Based on these test, I optimize the CPU/Memory usage of the devices.
- I extend the API and the cloud connectivity of the embedded devices.
- I maintain and expand the **CI/CD pipelines** in **Gitlab**.
- I contribute **patches to upstream projects** that are being used from the devices.
- I communicate with various stakeholders that are distributed across the globe to align all the necessary use cases and functional requirements.

Sep. 2017 – **Software Engineer**, AUTOFORM DEVELOPMENT GMBH,
Feb. 2022 Zürich, Switzerland

Software Engineer at AutoForm Development GmbH, where I develop/maintain the existing source code using **C++ and Qt**. Specifically:

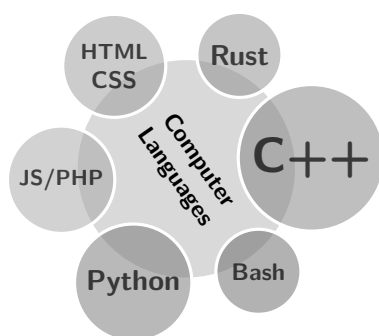
- I provide input for **architectural changes** that **improve the performance** of the products and help in the maintainability and the quality of the source code. I have been involved in large scale refactoring efforts.
- I conduct performance analyses using the **Intel Inspector** memory and thread debugger. I have resolved bottlenecks to improve the performance of the software.
- I integrate 3rd parties libraries by creating Conan recipes.
- I participated in the modernization of the code base by introducing **C++17**. A new **C interface** to decouple the code base from external projects that still had to use old compilers was created to keep the necessary ABI compatibility for the external projects.
- I help in the improvement of the build speed and the modularization of the software by producing packages using the **Conan** Package Manager and Modern **CMake**.
- I maintain the **Jenkins CI** infrastructure and implement new CI/CD jobs using JobDSL.
- I develop and deploy **Docker** images to build the software in different environments.
- I participated in the implementation of the new “Guidelines” feature of the AutForm R8 product. I provided input that **improved the UX** and implemented the functionality that automatically checks the correctness of the applied processes in the software.

- Sep. 2015 – **Research Assistant**, ETH ZURICH,
 Apr. 2017 Zurich, Switzerland
 Research assistant (Wissenschaft assistenz) in the “Location-Aware Mobile Eye Tracking for Tourist Assistance” (LAMETTA) research project, where:
- I developed an outdoor **gaze-based interaction** platform for mobile eye trackers using **C++ and OpenCV**.
 - I was teaching assistant in (a) GIS III and b) Mobile GIS and Location-Based Services courses, where I got experience in the development of **web geo-applications using Geoserver, OpenLayers, HTML5/JS, open web service standards (OGC WMS,WFS)** and **Android applications**.
 - I maintained the **WordPress installation** of the group site.
- Jan. 2014 – **Accountant’s affairs assistant**, D. XATZIKOMNINOS & SIA E.E.,
 Dec. 2014 Athens, Greece
 Support to accountant's affairs, by managing the existing database for issuing invoices and helping in the daily operations of the company.
- June 2010 **Internship in surveying engineering**, NTUA,
 Nisyros, Greece
 Creation of the local trigonometric and elevation network and AutoCAD plans were produced for the traditional village of "Mandraki" .
- Aug. 2007 – **Accountant’s affairs assistant**, D. XATZIKOMNINOS & SIA E.E.,
 Jun. 2010 Athens, Greece
 Support to accountant's affairs, where I helped in the organization of the accounting department with the **creation of a database in Microsoft Access** for issuing invoices.

Seminars/Certifications

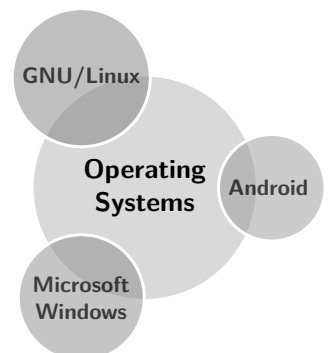
- Jun. 2023 **LFS258: Kubernetes Fundamentals**, Course on operating Kubernetes Clusters
 Feb. 2022 **SAFe 5 Practitioner**, SAFe for Teams Course (5.1)
 Apr. 2020 **Conan Essentials/Advanced**, Hands-on courses on the use of the Conan Package Manager
 Mar. 2019 **Scrum Essentials**, Introductory course to the Scrum framework
 Oct. 2008 **Autodesk AutoCAD**, ECDL certification in Autodesk AutoCAD 2007

Abilities / Skills



Software Environments: Qt Creator, Visual Studio, Visual Code, Jira, Android Studio, Microsoft Access

Tools: Git, PostgreSQL, CMake, Conan Package Manager, Yocto, Apache HTTP Server, Doxygen, Docker, Podman, Jenkins



Eye Tracking

Experience in using SMI and Pupil labs mobile eye trackers and conducting user studies

Surveying skills

Equipment Total station, Level, GPS receiver (RTK/Static), Terrestrial Laser Scanner
Software AutoCAD, ArcGIS, QGIS, Leica Cyclone

Education

- 2013 – 2015 **MSc in Informatics**, *University of Piraeus*, Department of Informatics
GPA – 9.83/10.00, Thesis grade – 10.00/10.00
- 2007 – 2013 **MSc in Geomatics**, *NTUA*, School of Rural and Surveying Engineering
GPA – 7.85/10.00, Thesis grade – 10.00/10.00, Ranking – 15th

Languages

Greek	Native	
English	C2 - Proficient user	<i>University of Cambridge - Proficiency in English</i>
French	B1 - Independent user	<i>Dalf C1</i>
German	B1 - Independent user	<i>Goethe-Zertifikat B1 – Currently training for C1</i>

Awards/Publications

- 2017 V. Anagnostopoulos et al., *Gaze-Informed Location Based Services, International Journal of Geographical Information Science*.
- 2015 M. Tsakiri and V. Anagnostopoulos, *Change Detection in Terrestrial Laser Scanner Data Via Point Cloud Correspondence, IJEIR*, 4(3):476–486.
- 2015 **Scholarship in MSc in Informatics**, *University of Piraeus*, Department of Informatics
For my performance in the MSc I was awarded a scholarship

Projects

- **recipes.anagno.me** The documentation pages for my personal Kubernetes cluster using mainly Raspberry Pi boards.
- Contributor to the Conan Center recipes
- I challenge myself by making wooden scale models and Lego puzzles
- Tinkering with Raspberries Pies and single-board computers
- Enjoying low temperature long time cooking (Sous vide)

References

Upon request