

Dimitrios Kanellopoulos

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Professional Profile

Extensive experience in embedded software development with background in electronics, electric motors and electrical engineering. Resourceful and productive team player with strong communication, organizational, time management, analytical and problem-solving skills. Reliable and dedicated with the ability to grasp and apply new ideas, concepts and cutting-edge technology quickly whilst demonstrating a logical and analytical approach to solving complex problems and issues. Able to work on own initiative while demonstrating the organization and prioritization required to achieve tight deadlines and deliverables. Enjoys being part of a successful and productive team.

Objective

Currently looking for a new and challenging position, one which will make best use of existing skills and experience while enabling further personal and professional development.

Education and Qualifications

M.Eng. & B.Eng. Electrical and Computer Engineering, National Technical University of Athens

Thesis: *Information Systems, efficient algorithms and their applications.*

Courses Software Development, Algorithms, Networks, Microprocessors, Computer Science

Career Summary

Jan. 2018 – date **ZF Group**, Birmingham
Senior Software Engineer

- Responsible for Electric Power Steering (EPS), Base Layer Software, requirements and control.
- Electric Drive Motor Position Sensor Lead, new **sensor integration** and calibration.
- Working on Aurix Infineon **microprocessors** with the view to improve performance, lowering CPU usage
- Requirements analysis, Stress testing Sensors for analysis and calibration purposes.
- Lead project of improving thermal behavior of the system & decreasing ripple current via software technique thus, reducing cost by avoiding hardware solution.
- Implemented a motor bridge separation mechanism, necessary for achieving fault tolerance.
- Developing new automated software validation procedures (Unit Testing)
- Responsible for complex problem investigation with no previous or obvious solution, which required non-standard testing and technical report of the results.
- Realized in the V-Cycle product development (SWE.3, SWE.4)
- Proficient in use of C for embedded application, debugging software, Matlab for data analysis, Simulink code generator, Canape (VX1000, Can), Cantata (Unit Testing), Polyspace (Static analysis, code proving), Integrity (Versioning)

2017 – 2018 **ISI Hellas**, Defense and Aerospace, Attika, Athens
Software Engineer

- Responsible for implementation of new driver for electronic support measures sensor (ESM).
- Resourceful for integrating the sensor driver into the company's product via network protocols (TCP & UDP)
- Managing release cycle planning, requirements delivery schedule

- Requirements analysis, author of software design documentation (SDD) as well as Software requirements specification (SRS)
- Collaborating in multi-company projects for software deliverables.
- Development with Ada, and Solving problems of different nature, automating build process, developing stress-test software via Python

2015-2017 Researcher, NTUA Athens, Greece

- Developed algorithms for 3D image analysis and pattern extraction, 2D image object outline extraction and pattern recognition,
- Publication on Springer after taking part at the 10th International Symposium on the Conservation of Monuments in the Mediterranean Basin. Title: A Novel Information System for the Automatic Reconstruction of Highly Fragmented Objects with Application to the Reassembly of Prehistoric Wall Paintings and Vessels (Online ISBN: 978-3-319-78093-1)
- Implemented a finite precision error check system in Computer Systems. Developed and algorithm to detect errors and correct them (C++)
- Taught in lecture theaters and laboratories: Digital System Design, Introduction to Software Development, Control Systems. (MATLAB, C)

2012-2016 IT Consultant, INCOM Ltd., Athens, Greece

- Improved Backup company's procedure by revising a new automatic system and developing software to monitor the status of the storage server.
- Developed web-based database for the company's collection of experts (>9000 CVs) using PHP and MySQL and set up a server to host the aforementioned database.
- Experienced with EU tendering procedures for EU funded, Technical Assistance projects (European Commission (EC), European Training Foundation (ETF), World Bank (WB))

2008-2012 Junior IT Consultant, INCOM Ltd., Athens, Greece

- Responsible for company's web presence. Using PHP, MySQL, HTML and CSS updated information regarding company's projects, tenders and job announcements.
- Managed computer systems' security and performance. Local Area Network development.

Key Projects

Active Kinematics Control (AKC): Member of software development team of AKC project. AKC allows steering angles of the rear axle wheels. The system provides situation related control and achieves reduced turning circles, smaller steering wheel rotation and stability improvement in steep turns. Improvements via staggering two bridges and decreasing the ripple currents.

Dual Power lane EPS: Member of software team. This is a new concept of EPS electric drive operation. The motor is split in half and each half is operated by independent ECUs and power supplies, so that better fault tolerance is achieved. Designed mainly for Steer-by-wire projects. Communication between ECUs with signals. Implemented a High-resolution Motor Position Sensor and Motor Bridge Separation Mechanism.

Further Training

2019	Functional Safety and Software – ISO 26262 and Auto Spice (ZF)
2018	Simulink for Automotive System Design
2018	Agile Working – Scrums (ZF)
2018	Integrity Lifecycle Management (ZF)

Further Skills

Programming	MATLAB, Python, C, SML/NJ, Prolog, Java
Tools	CANape, CANalyzer, Integrity, Jira, DOORS, Windchill, Simulink
IT Skills	Microsoft Office, Visio, Outlook, OneNote, Server Administration
Languages	Fluent Greek; Fluent English; Basic German;

Interests and Activities

Currently Include	STM development boards, Raspberry Pi home automation projects
Other	Currently reading about Clean Code

References are available on request