

Martin Suszczyński



36 years old
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WORK EXPERIENCE

CURRENTLY SINCE JAN 2016 (VILNIUS, LITHUANIA || REMOTELY WORLDWIDE)
SIMAR.win

Consulting Services

Goal: Together with my wife Dr. Simona Liukaitytė-Suszczyńska (PhD in Optics), we are helping to solve many challenging R&D issues

Key responsibilities:

- Crypto trading / mining, **quantitative** data analysis, developing **blockchain** applications and build systems.
- Reducing binary-seeds to **debootstrap** systems from source and making it fully reproducible-build.
- Auditing, sanitizing, **fuzzing** and hardening software.

Key achievements:

- Organizing dedicated Qt for Python and **Qt for MCU** training courses in cooperation with NanoScribe company.
- Subprojects support for InJet, Arimex, Skanska, Kareteq, Airbus, BridgeScanner, Credit24, OHB System, Light Conversion and Clean-Solutions.
- Debian Cloud-Team and Guix DevOps.

MAY 2019 – MAY 2020 (MUNICH, GERMANY)

Insta - Intopalo

Senior Embedded Linux Software Engineer

Goal: Developing and maintaining **full-stack** software for major automotive projects using C/C++, Python, **Qt/QSkinny** and buildroot.

Key responsibilities:

- Optimizing boot time, enhancing system performance and developing inside the **BSP (linux drivers, kernel patching)**.
- Working with issues related with TCP/UDP, CAN/GD/J1939, EXT/ECU/TPC, D-Bus, **QEMU**, MIPS/x86/ARM/**RISC-V**.
- Planning diagrams, software specifications, reports and integration schematics in Polarion.

Key achievements:

- My code running in production for **AGCO CORP**, i.e.: Fendt, Massey Ferguson, Challenger and Valtra tractors.
- **Qt Company Premium Partner**.

OCT 2017 – MAY 2019 (TOULOUSE, FRANCE)

Adveez

Embedded Linux Software Engineer

Goal: Developing embedded linux software for various radio frequencies (**LoRa**, XBee, Sigfox, LTE, WiFi, BLE, NFC, UWB, etc) IoT solutions used in critical assets at airports, seaports, cities and buildings.

Key responsibilities:

- Conducting technical review and providing advisory services on new and current system designs.
- Agile development using **modern C/C++** in Gitlab platform.
- Creating from scratch **BK Wander Management System Server**.
- Features development, improvements and maintenance of the code
- Custom **firmware** design for x86 industrial PCEngine hardware based on **Coreboot**.

Key achievements:

- My code running in production for various international airports.

PROFILE

Software Engineer with more than 10 years of international experience in R&D, signal processing and system level programming.

Specialized in various Human Machine Interfaces (HMI) and Blockchain Architectures. Full-stack embedded linux developer from low-level coding, **security hardening**, creating distributed applications with complex API to final system integration with user friendly UI frameworks. Open-Source, freedom and privacy evangelist in every aspect of our life: IT, finance, health, science, politics, etc.

EDUCATION

2004 – 2009 **Master of Engineering (M.Eng.)**
APPLIED COMPUTER ENGINEERING (EZI)
Faculty of Electronics (EKA)
Politechnika Wroclawska, Poland (PWr)

COMPUTER SKILLS

PRODUCTION	C/C++, Python, Shell, PostgreSQL, Coreboot, Buildroot , Debian, QEMU , CMake, OpenCV, Qt/QML , L^AT_EX , Gitlab CI/CD , OpenWRT, Vim
TESTING	Javascript, Matlab/Octave, Docker, Pandas, SciPy, NumPy, Boost, Yocto, Mercurial, ROS, Emacs, LineageOS,
EXPERIMENTAL	Haskell, Rust , Coq, R, Guile, Monero, GuixSD, Bitcoin-Core, FFmpeg, FPGA

PERSONAL SKILLS

Goal Oriented

I believe in actions and experimentations over long-winded contemplations. I listen to everyone's viewpoints and use my judgement to immediately act based on consensus to achieve goals quickly, transparently, **reproducibly** and efficiently.

Physical Dexterity

Manual manipulation of **experimental electronics** and training within **embedded linux devices** have contributed to an enjoyment of working directly with real hardware.

Passionate

I have been interested in **System Theory** patterns related with Simulation, Identification and Reconstruction. My education and R&D work experience have cemented this curiosity into a passion. I greatly enjoy **Applying Computer Engineering in Practics**.

NOV 2012 – NOV 2015 (MARSEILLE, FRANCE)

Ifremer

Research and Development Engineer

Goal: Performing R&D activities in the areas of positioning, robotics, acoustic, imaging optics and **image processing**.

Key responsibilities:

- Performing synthetic simulations and in situ real data validation with scientific equipments.
- Mentoring new graduate/internships for technical ramp up, instructing group newcomers for problem solving process.
- Developing realistic models for underwater image formations.
- Developing algorithms for **quantitative reconstructions** of underwater images.
- Cooperating with project partners from different international teams.

Key achievements:

- My code running in production for **Victor 6000** Vehicle.

APR 2012 – JUL 2012 (LA SPEZIA, ITALY)

NATO - CMRE

Visiting Research Fellow

Goal: R&D centered on the maritime domain, delivering innovative and field tested Science & Technology (S & T) solutions to address defense and security needs of the Alliance.

Key responsibilities:

- Developing an ATR (Automatic Target Recognition) application for an AUV (Autonomous Undersea Vehicle) based on SAS (Synthetic Aperture Sonar) images.
- Participating in Cross compilation workflow, board bring-up and Linux porting on **customized boards**.

Key achievements:

- My code running in production for **MUSCLE** Vehicle.

APR 2010 – FEB 2012 (LAS PALMAS DE GC, SPAIN)

Elittoral

Software Engineer

Goal: Developing software specialized in the undertaking of coastal and oceanographic engineering studies in the marine environment.

Key responsibilities:

- Developing GIS (Geographic Information System) applications to control the quality of coastal water.
- Maintaining **scientific equipment** and a boat for sea trials.
- Ensuring data acquisition parameters and quality of data.

SEP 2007 – SEP 2009 (WROCLAW, POLAND)

Institute of Computer Eng.

Research and Development Technician

Goal: R&D in Computer Vision Systems and Control Theory.

Key responsibilities:

- R&D defect detection and evaluation from sampled images.
- Designing and developing a rich client platform for modular vision systems.
- Developing various **OpenCV** modules supporting **POSIX IPC**.
- Developing and integrating final software with a custom Linux Live-CD solution.

Key achievements:

- My code running in the lab for didactic purposes.

SPOKEN LANGUAGES

FLUENT	English, Polish
INTERMEDIATE	French, Spanish
BASIC	Lithuanian , Russian

MISC.

LICENSES	Driving license cat.B + own car Water Life Guard Motorboat Helmsman
GRANTS	2012 - Region PACA in France 2011 - Ministry of Science R&D&I in Spain 2010 - Leonardo da Vinci from EU 2007 - Ministry of Science in Poland

PARTICIPATION IN...

2021	FOSDEM Conference, Online
2020	Embedded World in Nuremberg, Germany
2019	Semi-Marathon in Marseille, France
2018	Semi-Marathon in Paris and Toulouse France
2017	Blockchain-dev seminar in Wroclaw, Poland
2016	Full-Marathon Côte d'Azur Nice-Cannes, France
2015	UPMC seminar in Paris, France
2014	Fresnel seminar in Marseille, France
2013	LLOMEx sea trial in Mediterranean waters
2012	SAUC-E competition in La Spezia, Italy
2011	WGUG seminar in Wroclaw, Poland
2010	Capaware-GIS in Las Palmas de GC, Spain

VCARD



SCAN ME