Pascal Geiser

https://resume.pgeiser.com

Senior Manager Software Engineering with DevOps skills

EPFL MSc in Microengineering

15.08.1980
Swiss
Married
1 baby

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Address

Rue du Centre 5
2525 Le Landeron

Languages

French (Native)
English (Professional)
German (Basic)

Soft Skills

Synthetic thinking
Sense of responsibility
Flexible and proactive
Open minded
Goal oriented

Hobbies

Cycling
Photography
Cooking
Travelling
Computer science

PROFILE

20 years of experience in embedded software development on Wireless ASICs and FPGAs and passionate about computer science in general.

Main strengths:

- C / C++ / Python / **git** / Bluetooth / RTOS / Bare machine computing
- Devops with Linux-Ubuntu / Docker / Vagrant / Ansible
- Broad view of development process: requirements / specifications / milestones definitions / agile development including test and documentation
- Capacity to act as a link between project leaders and SW developers (aka SW Product Owner)
- Software development methodology: pursuit of efficiency through agile development supported by continuous integration and continuous deployment

EXPERIENCES

Sonova Group (Phonak) 2006-now

Sennheiser TV Clear Set 2, Sennheiser TV Clear Set : Product Owner for the wireless 2020-2023

Wireless earbuds with TV streamer: developed jointly with two 3rd party companies. Documentation, API definition and release of the wireless component of the system

Audeo Paradise : SW Workpackage Leader 2018-2020

Hearing-aid with support of 2 simultaneous Bluetooth connections: wireless protocol coexistence update (Bluetooth®, Roger^{tm} and Binaural VoiceStream^{tm}). Definition of tasks and reporting for a team of 4 people

Audeo Marvel : SW Workpackage Leader 2016-2018

First true wireless, made for all, hearing-aid: wireless protocol coexistence. Definition and implementation of a clean API to mix 3 wireless protocols: Bluetooth®, Roger^{tm} and Binaural VoiceStream^{tm}. Definition of tasks and reporting for a team of 4 people

Audeo B direct : SW Workpackage Leader 2014-2016

First Hearing-aid with Bluetooth classic Hands-Free support: implementation of Roger^{tm} Wireless technology for all future Sonova's Hearing Aids using SWORD^{tm}

SWORD^{tm} : SW Project Leader 2013-2014

Revolutionary radio ASIC (40 nm CMOS, video): HW specification, SW architecture, recruitement of SW engineers, SW development and testing in collaboration with Semtech. Installation and maintenance of Gitlab server Work within a team of more than 15 SW developers

Roger^{tm} Pen : SW Platform Architect 2010-2013

Digital audio transmitter: platform setup, SW specification and implementation on STM32L1 (ARM Cortex-m3), CSR 8670 Bluetooth chip and custom radio ASIC with the help of 3 external resources

Roger^{tm} X : SW Platform Architect 2008-2010

Digital audio receiver: HW specification, SW development and testing on a custom Radio ASIC (180 nm CMOS) using a low-power Coolflux DSP developed in colaboration with EM Microelectronic and ASICentrum. Responsible of the ROM code delivery within a team of 4 people

Inspiro : SW Platform Architect 2007-2008

Wireless transmitter for schools: toolchain (Eclipse and GCC). Architecture design for modularity and firmware development on Atmel AT91SAM9 (ARM926-ejs) with Sciopta RTOS. Installation and maintenance of Subversion server and Buildbot for continuous integration

MLxi : Main Developer 2006-2007

Dynamic FM receiver: facilitates integration of hearing impaired childrens in school. Entire firmware development in C and assembly on a Coolrisc C816 from Xemics in collaboration with Ansem for the RF

Esplab (IMT, University of Neuchatel) 2003-2006

AttraWatch : TI C55x DSP engineer 2003-2006

Dictaphone watch: implementation of WB-AMR audio codec (ITU-T G722.2) on a watch. Collaboration with ASULAB (R&D departement of Swatch Group)

HARD SKILLS

Coding

C/C++ on constraint embedded systems using GNU GCC, ARC Metaware, Keil MDK and more

Multiple RTOS and Bare Metal Embedded Systems: Sciopta, embOS, ThreadX, FreeRTOS

Python toolchain automation, integration tests and system tests

UML state machines with code generation using QP / QM from Quantum Leaps

Bluetooth: Controller stack integration, Host stack integration (Bluetopia), application development, debugging with Ellisys Sniffer bluetooth protocol analyzer

Oscilloscope, logic analyzer (Saleae), bus and protocol debugging (I^2C, SPI, I^2S, USB on STM32 and custom chips), automation in Python

Buildbot for continuous integration and continuous delivery

git Git (daily use) and Subversion (previously) + server and access right management

Devops

Linux administrator and user of (Debian) since 2000: Bash, SSH, Systemd, Gnome and more

Docker Containers creation and maintenance Ubuntu Server on Dell PowerEdge R440 Redhat Ansible server deployment, automated IT and infrastructure maintenance

Knowledge to refresh

C# implementation of GUI for control applications, Java development tools

CERTIFICATES

Python Advanced - Human Coders	(2021)
Presentation skills for convincing business presentations - synorga	(2021)
Aspiring Leaders - sonova.com	(2021)
BLS-AED-SRC (Samaritains) - samariter.ch	(2021)
GIT advanced - Human Coders	(2021)
Docker - Orsys	(2018)
Bluetooth operation, Procedures and Testing - Inacon	(2014)
Agile, Scrum and eXtreme Programming - Digicomp	(2013)
Leadership - CRPM Lausanne (now romandie formation)	(2013)
Programming in C# with Microsoft Visual Studio 2010 - CFI	(2011)
Rhapsody OXF - Evocean	(2008)
Advanced Matlab - University of Neuchâtel	(2005)
TMS320C55x Integration Workshop - Texas Instruments	(2005)
Introduction to VHDL - University of Neuchâtel	(2004)
Introduction to Mechanical Engineering - CPLN	(Feb 1999)

EDUCATION

M.Sc. in Microengineering (Final grade: 5.45 over 6) - EPFL	(1998-2003)
High school with honors - Gymnase Cantonal de Neuchâtel	(1995-1998)