

Paul Becue

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Professional objectives

- Engineering – IT – Business software solutions – Integration of systems
- Embedded soft- and hardware solutions:
 - Projects of embedded systems, Internet of Things.
 - Embedded systems coupled with mobile clients and server software.
 - Python, C++ and Java software development
 - Embedded Linux
 - Embedded hardware development
- Web, SPA, PWA development: Vue.js, Nuxt.js, HTML, CSS, Javascript, Bootstrap, Tailwind css, Uno.css, WordPress
- Mobile devices and development:
 - Full stack development
 - Backend with Python: Flask, FastAPI
 - Web Frontend: Vue.js, Nuxt.js, SPA, PWA, HTML, CSS, Javascript
 - Standalone development with Kivy, Qt, ...
- GIS development:
 - GIS software development
 - Dedicated route planning for companies
- Build and test automatisaton, simulation, hardware-in-the-loop systems
- Business workflow automation - Office automation
- Research projects and proof of concepts
- Robotica projects (oa Universal Robots) and artificial intelligence (oa RAG systems en agents)
- Electronics and mechanics (oa with KiCAD and FreeCAD)
- 20 years of experience in leading people and working with people
- Experience with: Python, Vue.js, Nuxt.js, C++, C#, .NET, Java, PHP, SQL, Qt, Android, HTML, CSS, Javascript, jQuery, Bootstrap, Tailwind CSS, Git, Microcontrollers, Word, Excel, Adobe Indesign, Gstreamer, MicroPython and KiCAD.
- Open for dialogue, new ideas and technologies
- Looking forward for challenging projects

Technical Expertise

- Master in electromechanical engineering - speciality electronics and control engineering
- Knowledge of Linux, Windows, MacOS, iOS, Android, Embedded Linux, Linux drivers
- Experience with Embedded Linux, Linux, Yocto, Buildroot, Android, ChromeOS, Embedded Windows
- Software development with Python, HTML, CSS, Javascript, Vue.js web framework, MicroPython, Qt, C++
- Mobile first development with Vue.js and Nuxt.js
- App development with Cross Platform Tools and Android
- Development of software and hardware architecture
- Version control systems with Git and SVN
- Back-end development with embedded servers
- Polling and push systems, messaging systems with NATS.io, redis, SIP, XMPP, MQTT and websockets
- Voice and video systems

- Hardware interfaces and software drivers to hardware interfaces in Linux
- Many years of experience with Windows systems and software
- Building and install PCs, embedded devices and microcontrollers
- System administration on Windows and Linux
- Experience with wired and wireless networks and all kind of protocols involved
- Test automation: building and maintaining real time test system and test software, test automation in automotive industry
- Universal Robots development
- Open source Large Language Models (oa ollama) and ChatGPT
- All kinds of simulation with Python, Vue.js, C and C++
- Hardware development and PCB design with KiCAD
- Mechanical design for CNC with FreeCAD
- Webapplications with Nuxt.js and Vue.js
- Websites with Wordpress, Bricks Builder and other builders

Human skills

- Leading a group of people and making a team from a group of individuals
- Make people grow
- Training and coaching people

Career

- Consultant (Partool, Oesterbank, Bosschaert, ILVO) 2023-2024
- Welding program for Universal Robots for Partool, Oostende 2022
- Starterslabo with VDAB - 18 months 2021-2023
- Embedded Developer 2020-2021
Marelec Nieuwpoort
 - Software for simulation of Marelec Portio for Sales department in C++/Qt
 - Setting up system for regression tests for software on Jenkins server in Python and Shell scripting
 - Setting up automatization and unification of software builds
 - Issue solving for Marelec embedded software in C and C++
 - Research for future improvements for the embedded system
- Consultant 2015-2019
Verotech Leuven
 - Real time test system for controllers in the automotive industry - Dana Bruges
 - Development of hard- and software for an audio based embedded system in the agriculture sector
- R&D Engineer 2012-2015
Televic, Izegem
 - Base embedded Linux system for Televic Plixus system
 - System for video broadcasting to Android device based on XMPP protocol
 - System for voice communication based on SIP protocol
- 7 years of freelance projects 2005-2011
 - Remote control with embedded systems
 - Web based accountancy system written in PHP
 - System for digital signage driven by mobile app
 - Video surveillance system
 - System for remote measuring of heating costs
 - Fast sound playback system
- Parish Priest Harelbeke 1997-2012
- Grootseminarie Brugge 1993-1997
- Candidature Unique en Philosophie 1992-1993
UC Louvain

- Assistant Electric Engineering - KU Leuven
 ○Field oriented system for high dynamic control of electric AC motor

1989-1992

Studies

- Burgerlijk elektrotechnisch-werktuigkundig ingenieur (richting elektrotechniek – optie elektronica: regeltechniek) – K.U. Leuven - 1988
- Candidat en Philosophie + Sacrae Theologiae Baccalaureum – Université de Louvain - 1992 – K.U. Leuven - 1996

Courses last years

- Embedded Linux System development Training, organised by Free Electrons - <https://bootlin.com/>
- Fast Track to Sencha Touch organised by Sencha, Inc. - www.sencha.com
- Programming HTML5 Applications organised by U2U - www.u2u.net
- Learning .NET programming - C# Essential Training - C# Design Patterns - lynda.com
- Basisopleiding agenten stralingsbescherming klasse III toestellen
- DevOps in action: SD-WAN, Infrastructure as Code, GitOps and zero trust security
- Web development: HTML, CSS, javascript, web frameworks
- Visual Studio Code
- Angular
- Odoo
- FastAPI
- Vue.js 3 and Nuxt.js
- Bootstrap and Tailwind CSS
- KeyCloak Oauth 2.1 security
- KiCAD

Read Books last years

- Gargenta, M., and Nakamura, M.. 2014. Learning Android - 2nd Edition. Sebastopol: O'Reilly Media.
- Roa S., 2012. Teach Yourself C++ in One Hour a Day - 7th Edition. Pearson Education, Inc.
- Downey A., 2012, Think Python. Sebastopol: O'Reilly Media.
- Bayle J., 2013. C Programming for Arduino. Packt Publishing.
- Banzi M., 2011. Getting Started with Arduino, 2nd Ed. Sebastopol: O'Reilly Media.
- Barnes D., Kölling, 2002 Objects First with Java. A Practical Introduction using BlueJ. Pearson Education, Inc.
- Saint-André, P., Smith, K. Et al, 2009. XMPP: The Definitive Guide. Sebastopol: O'Reilly Media.
- Downey, A., 2012. Think Complexity. Sebastopol: O'Reilly Media.
- Taymans, W., Kaker, S. Et al GStreamer Application Development Manual
- Fraser, N., 2009. Differential Synchronization.
- Yaghmour, K., Masters, J., 2008. Building Embedded Linux Systems. Sebastopol: O'Reilly Media.
- Hildebrandt, R., Koetter, P., 2005. Book of Postfix. No Starch Press.
- Lafore, R., 2002. Object-Oriented Programming in C++. Sams Publishing.
- Rohaut, S., 2009. Maîtrisez l'administration du système. Eni éditions.
- Salavador, O., Angolini, D., 2014. Embedded Linux Development with Yocto Project. Packt Publishing.
- Doug Hellman, 2018. Python Module of the Week.
- Dan Bader, 2018. Python Tricks.
- Rick Van Hattem, 2016. Mastering Python.
- Kurose, Ross, 2012. Computer Networking. A Top Down Approach.
- Jackson, W., 2012. Android for Absolute Beginners.
- Free Electrons, 2014. Embedded Linux system development.
- Robert Johansson, 2015. Numerical Python.
- Bill Lubanovic, 2014. Introducing Python.
- Lawhead Joel, 2019. Learning Geospatial Analysis With Python, 3 Ed., Packt Publishing.

- Victor Hugo Garcia, 2023. Getting Started with Angular, Create and Deploy Angular Applications, Packt Publishing.
- Wilken Jeremy, 2018. Angular in Action, Manning.
- Govindaraj Siddharta, 2015. Test Driven Python Development, Packt Publishing.
- Ninja Squad, 2023, Become a ninja with Vue, Ninja Squad.
- Bill Lubanovic, 2024, FastAPI, O'Reilly Media, Inc.
- Roberto Ulloa, 2015, Kivy - Interactive Applications and Games in Python, 2nd Edition, Packt Publishing.
- Evan You, Vue Guide, 2024, copy in pdf of online guide.
- Daniel Reis, 2022, Odoo 15 Development Essentials, 5th Edition, Packt Publishing.
- Tailwind CSS Starter Kit, 2022, JS mastery.
- Shruti Balasa, 2021, Complete Guide to CSS Flex & Grid - Tailwind CSS.
- Adam Wathan, Steve Schoger, 2022, Refactoring UI.
- Stian Thorgersen, Pedro Igor Silva, 2023, Keycloak – Identity and Access Management for Modern Applications, Second Edition, Packt Publishing.
- Pablo David Garaguso, 2023, Vue.js 3 Design Patterns and Best Practices, Packt Publishing.
- Ed Freitas, 2022, Nuxt.js Succinctly, Syncfusion, Inc.

Languages

- Active knowledge of Dutch, French, English
- Passive knowledge of German and classic Humaniora
- Knowledge of Greek and Hebrew
- A year of study in French (Louvain-la-Neuve)

PC knowledge

- Office and OpenOffice
- IDEs: IntelliJ, PyCharm, Webstorm, Eclipse, Android Project, Qt Creator, Visual Studio, Visual Studio Code
- All kinds of processing programs: photo, video, text, synchronization, servers, message driven architecture
- System administration with Windows, Bash and Python.
- Linux desktop and Open Source alternatives for many software packages

Various

- birth place and date: Kortrijk, 9 augustus 1965
- driving license A and B

References on demand