



WIM DE WITTE

Embedded Systems Engineer



Sint-Niklaas



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0486/39.47.05

INFORMATION

Dewicon BV
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<https://dewicon.be/>



SKILLS

LANGUAGES SKILLS

Dutch

English

INTERPERSONAL SKILLS

Taking initiative

Efficient & Prioritized

Communication

ENGINEERING SKILLS

Creative & Innovative

Analytical & Problem Solving

Attention to Detail

Eager to learn & Autodidact

PROFILE

As an embedded systems engineer, I'm taking up the role as hardware and software architect for your product, finding the right balance between development and product cost resulting in a successful product.

As an embedded software developer, I'm specialized in linux, bootloaders and firmware with electronics interaction.

WORK EXPERIENCE

Hardware - Embedded Software Architect 2018-2024

[Niko - Wygwam](#) (2024)

Similar products as fifthplay including access control systems and sensor solutions

- Responsible for the architecture of different products
- Research projects internal and Vlaio funded
- Investing, discussing, challenging product requirements with stakeholders
- Feasibility, integration and risk analysis studies
- Proof-of-concepts electronics and software
- Defining hardware and embedded software architecture
- Product and project cost calculations
- Supporting, reviewing and assisting development teams
- Evaluating and studying new technologies and trends

Hardware - Embedded Software Engineer 2008-2018

fifthplay (subsidiary company of Niko)

Home and building automation systems

Energy management and IoT solutions

- Hardware architect working with external partners
- Embedded software engineer linux and firmware
- Responsible for full product design from idea up to series production
- Architect for multiple gateways



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HOBBIES

DIY



IoT



Culture



Trips



EDUCATION

Electronics Engineer Master
Telecommunications
IHAM
1991 - 1996, Antwerpen

CONTINUED WORK EXPERIENCE

Hardware Design Engineer 2001-2008
Niko
Home automation systems Nikobus, NHC

Hardware Design Engineer 1998-2001
Thales Communications Belgium
Electronics development of military telecom equipment

Hardware Design Engineer 1996-1998
Chevalier Photonics
Electronics development of opto-electronic measurement equipment including space appliances

TECHNICAL EXPERIENCES

- **Architect:** See experiences Niko and fifthplay
- **Software:** firmware, drivers, devicetrees, hardware/software protocols, API's, bootloaders, OTA/DFU, IP stacks/protocols, hardware security, ...
- **OS:** Linux kernel and OS, freeRTOS, u-boot, bare-metal
- **Security:** secure boot, OPTEE, secure chain of trust, authentication, encryption, privileges
- **Programming Languages:** C, Python, bash scripting
- **Build, Deployment, Management:** Yocto expert, Makefiles/CMake, Git, Jenkins, Docker containers, (secure) commissioning, setting up toolchains and test systems ...
- **Controllers:** Cortex-M (NXP, Silabss, Renesas, ST ...) and Cortex-A (NXP, TI), Espressif ESP32 ... in-depth hardware and software knowledge of all peripherals and sub-systems
- **Multimedia:** gstreamer pipelines, SIP, audio (e.g. alsa) and video (e.g. v4l, camera) ...
- **Testing & debugging:** Board bring-up HW and SW, logic and protocol analyzers, SWD/JTAG, stack trace, IDE based (eclipse, VS code), automated testing (reliability and durability)
- **Networking:** RF protocols (e.g. sub-GHz, Zigbee, BLE, WiFi), Low speed bus systems (e.g. modbus, CAN), TCP/UDP/IP services and protocols (e.g. MQTT, HTTP, ...)