Domen Puncer Kugler

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SUMMARY

Embedded Software Engineer with a decade of professional experience designing, developing and testing embedded systems. Capable of debugging software and hardware issues on his own.

SKILLS

Programming	C, Assembly (ARM, x86, other), Scripting (Python, bash, regex)
Source code	Git, Subversion, patch, diff
Microcontrollers	ARM Cortex-M3/M0 (STM32, LPC), Atmel AVR
Electronics	Oscilloscope, Schematics, Soldering
Communication busses	SPI, I2C, RS232, RS422, 1-Wire, USB, Ethernet, CAN, DALI
Wireless	WiFi, Bluetooth, ZigBee, other (nRF24L)

EXPERIENCE

Samsung Electronics, UK *Senior Software Engineer*   `2012-Present`

BSP Engineer: Improved debugging and testing tools for board support developers.
Ethical Hacker (since 2013): Improved security of latest flagship devices by black-box and white-box vulnerability assessment. Experience on all software levels from bootloader and kernel to mobile applications. Reviewed code, wrote hundreds of security bug reports and guided developers in fixing the vulnerabilities.
Achievements: Received employee of the quarter award; placed top 10 in company-wide coding competition; presented computer algorithm courses; co-presented a lecture on mobile security.

Visionect, Slovenia *Software Engineer*   `2008-2012`

Lead Firmware Developer: Developed firmware on many different projects based on ARM Cortex-M3 microcontrollers; bring-up, sensors, communications, power optimisation. Identified hardware bugs on prototypes and developed software through the whole product lifecycle.

Ultra and Telargo, Slovenia *Part-Time Software Engineer*   `2006-2008`

BSP Engineer: Developed low-power support (sleep modes) for Lite5200b platform and got it merged into upstream Linux. Maintained and improved Linux drivers for Lite5200b (PowerPC) and DbAu1200 (MIPS) development boards.

Hobby Projects   `Occasionally`

· LPC13xx bootloader reverse engineering.
· Home automation based on LPC1313. Own firmware and PCB design.
· CBAOS - RTOS aimed at ARM Cortex-M3 and similar chips; preemptive tickless scheduling.

EDUCATION

University of Maribor, Slovenia *BSc/MSc Computer Science*   `2001-2008`

BSc/MSc equivalent (ISCED 5A) in Computer Science at Faculty of Electronics and Computer and Information Sciences (FERI)