




# Miroslav Vitkov

## Curriculum Vitae

### TECHNICAL SKILLS

---

GOOD LEVEL	C++11, STL, OpenCV, C11, UNIX, git, GNU make, CMake
INTERMEDIATE	python2, matplotlib, numpy, PyQt USB bus, OpenOCD, avr-asm, digital hardware design, LaTeX, Doxygen, UMLet Inventor, SolidWorks
BASIC LEVEL	FANUC G-Code, MySQL

	Sofia, Druzhba-2, bl. 202, app. 40
	0895 735 164
	sir.vorac@gmail.com

### EDUCATION

---

2007 – 2011	<b>Industrial Engineering (in English)</b> BACHELOR DEGREE <i>Technical University of Sofia</i>
2003 – 2007	<b>Communications technician</b> HIGH SCHOOL DIPLOMA <i>Technical School of Communications, Sofia</i>

### COMMUNICATION SKILLS

---

BULGARIAN	Native speaker
ENGLISH	Fluent (CPE Cambridge)
GERMAN	Basic

### PUBLIC PROJECTS

---

C++	<b>identity</b> <i>Identify persons. Uses OpenCV.</i>
C	<b>megaboot</b> <i>Simple atmega168 bootloader.</i>
C	<b>cgetset</b> <i>Generate getter/setter methods. Self-contained.</i>
PYTHON	<b>graph_temperature</b> <i>GUI to track temperature changes.</i>
LATEX	<b>rpg</b> <i>Role-playing game.</i>
INVENTOR	<b>gearbox</b> <i>Gearbox design and technical drawings.</i>

## WORK EXPERIENCE

---

20 MAY 2013 - 21 MAR 2015

Antelope Audio

### *C++ embedded developer*

Implementation of a complex audio processing algorithm in C++ for ARM. Audio signal processing design (z-transform, filters, impulse response, amplitude and phase diagrams). GUI design with Python and Qt. OpenOCD and hardware considerations.

12 FEB 2013 - 13 MAY 2013

Johnson Controls

### *C embedded developer*

Embedded C, concurrency, unit tests and documentation.

22 AUG 2011 - 15 JAN 2013

MM Solutions Ltd

### *C++ embedded developer*

C++ with Boost, OpenCV etc. libraries for ARM. GNU/Linux and git. Digital video processing in 3D environment (quaternions, field of view, image recognition, gyroscopes).