## Miroslav Vitkov

# Curriculum Vitae

#### TECHNICAL SKILLS

GOOD LEVEL \* C++11, stl, OpenCV

\* C11, GNU, Linux, Bash

\* git, makefiles, CMake

Intermediate \* python2, matplotlib,

numpy, pyQt

\* MatLab, SimuLink

\* USB bus, OpenOCD

\* avr-asm, digital hardware design

\* LaTeX, Doxygen, UMLet

\* Inventor, SolidWorks

\* SDL2, OpenGL

Basic Level \* FANUC G-Code

\* MySQL

\* Pearl, C#, Javascript

#### COMMUNICATION SKILLS

Bulgarian Native speaker

ENGLISH Fluent (Cambridge CPE)

GERMAN Basic

∠ | Sofia, Druzhba-2, bl. 202, app. 40

**a** 0895 735 164

sir.vorac@gmail.com
sir.vorac@gmail.com

#### EDUCATION

2007 - 2016 Industrial Engineering (in

English)

BACHELOR THESIS:

MULTITASKING AUTOTUNING PID CONTROLLER IN HEAT TRANSFER

APPLICATION

Technical University of Sofia

2003 – 2007 Communications techni-

cian

HIGH SCHOOL DIPLOMA Technical School of Commu-

nications, Sofia

#### PUBLIC PROJECTS

C++ identity

Identify persons. Uses OpenCV.

C micli

MIcro CLImate controller, an autotuning PID regulator.

C megaboot

Simple atmega 168 bootloader.

C cgetset

Generate getter/setter methods.

Self-contained.

PYTHON rtplot

Realtime temperature plotting

utility.

HASKELL voiceid

Identify diferent persons via

speech.

LATEX rpg

Role-playing game.

INVENTOR gearbox

Gearbox design and technical

drawings.

#### WORK EXPERIENCE

04 JAN 2016 - PRESENT

Euro Games Technology

### C++ Linux developer

POSIX - sockets, inter process communication, threads.

C++11, Bash, g++, clang.

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).