

Middle C/C++ developer



Location: [Minsk, Belarus](#) 

About Me:

C/C++ developer with 4 years of work experience in development using C/C++. Graduated from Belarusian State University (specialization – Mathematical Electronics).

Key technologies:

C, C++, Bash, Java, Python, MATLAB, Qt, OpenCV, Jenkins, Code Composer Studio, IAR Embedded Workbench, Banana Pi.

Work experience:

4 years

Finished projects:

6

Summary:

C/C++ developer of software for embedded systems. Has expertise in computer vision: use of OpenCV library, modeling images processing in MATLAB. Analytical and development skills, can easily work independently and as a team player.

Projects

OpenWRT-Engineering, Belarus

C++ developer, duration 01.2017 – till now

Description:

Realizing on fiscal printer board the application of work device, web interface for setting parameters.

Team:

5 developers,

1 project manager.

Duties:

- Realizing KKT protocol of exchange with OFD server, Pioneer protocol of exchange with top-level software, business logic of application;
- Writing article “What is hidden inside online cash register: fiscal registrator development”.

Technologies:

C++, Qt, Qt Creator, Jenkins, Python, Posiflex 6906, Git, Jenkins.

OpenWRT-Engineering, Belarus

C/C++ developer, duration 02.2016 – 12.2016

Description:

There are bash-scripts, used in Wireless N Router TP-Link TL-MR3020 with OS OpenWrt, for testing Wi-Fi networks, for sending collected data and debug information to web server, for updating firmware.

Team:

3 developers,

1 project manager.

Duties:

- Adapting the bash-scripts for Router Module WN-463 with using Ralink AP SDK;
- Cross-compile missing in SDK necessary packages for testing (such as curl, iperf3, mtr and others);
- Adding ability testing access points not only 2.4GHz, but also 5GHz;
- Source bash-scripts was changed: added functionality testing LAN network and corrected testing Wi-Fi networks. Implementing new functionality.

Technologies:

C, C++, Bash, Router Module WN-463 (MT7620A + MT7612E + MT7530), Git, Jenkins.

Firmware-Engineering, Belarus

C/C++ developer, duration 01.2016 – 02.2016

Description:

Creating firmware of SensorTag with below functionalities:

- OTA update;
- processing data (FFT) from microphone, accelerometer, IR temperature sensor;
- transfer data to external application via GATT service.

Team:

2 developers,

1 project manager.

Duties:

- Building and correcting standard examples from TI BLE-Stack SDK with a view to implementation OTA update functionality;
- Getting data from sensors and minimization occupied Flash and RAM memory;
- Testing OTA update functionality and transfer data to Smartphone or iPhone via SimpleLink SensorTag Software.

Technologies:

C, C++, CC2650SensorTag + Debug DevPack, Code Composer Studio, IAR Embedded Workbench.

Research&Development, Belarus

C/C++ developer, duration 09.2015 – 12.2015

Description:

Bring-up, run and test u-blox development boards (ENK-M8N, EVK-U27).

Team:

1 developer,

1 project manager.

Duties:

- Development of software;
- Implementing new features;
- Optimization;
- Stabilization.

Technologies:

C, C++, GPS, GSM.

VideoProcessing-Engineering, Belarus

C/C++ developer, 07.2014 – 08.2015

Description:

Development of the application for motion object tracking, which runs in real time on the TI processor with DSP and ARM cores.

Team:

5 developers,

1 project manager.

Duties:

- Selection of the algorithms for tracking objects. Pedestrian detectors: DPM (Deformable Parts Model) and HOG (Histogram of Oriented Gradients) + SVM (Support Vector Machine); algorithm TLD (Tracking-Learning-Detector); Calibration of the camera and stereo pair;
- Development of preprocessing of images to improvement of tracking (removal noises: hardware, weather environment, illumination);
- Development of the detector of motion objects;
- Development of application of motion object tracking on x86 (using developed detector of motion objects and implementation of algorithm TLD);
- Documentation of x86 application by Doxygen, description of the structure and workflow;
- Optimization of the application on x86;
- Writing article "Using DSP coprocessor DM8168 with framework C6Accel";
- Porting code to the ARM+DSP cores DM8168 (using C6EZAccel).

Technologies:

C, C++, 8168 Evaluation Module, DM6467T processor, Qt Creator, Git, OpenCV.

Research&Development, Belarus

C/C++ developer, 03.2014 – 07.2014

Description:

There is a video file with captured process of playing at a casino machine. Type of games – slot machine.

Team:

4 developers,

1 project manager.

Duties:

- Vuni-Digitizing-Engineering: optimization of recognize algorithm to catch stop of wheels;
- Studying MatLab.

Technologies:

C, C++, Java, MATLAB, OpenCV, Eclipse, MATLAB, Git.