

CURRICULUM VITAE

Personal information:

Name: Anna Kułakowska
Born: 02.11.1980 r.
Current address: Mosiężna 27/30, 53-441
Wrocław, Poland
Phone number: 48661942069
e-mail: anna.kulakowska@gmail.com



Profile:

My 10 years of experience covers wide range of technologies, mostly related to embedded devices and embedded software development for devices like mobile phones, laser measurement based systems and especially set-top boxes, with which I work already over 7 years.

I have been also involved in desktop applications and server-side applications development during my carrier.

I am experienced in C, C++ and Java SE. I also spend some significant amount of time on programming in Qt3 and Qt4, as well as in Java EE and Java Server Faces.

I have wide experience in development of MHP and MHP based applications for set top boxes. My software development skills include object oriented design and programming, I am familiar with the software development life cycle. I do also keep gathering background with designing user interfaces.

But I am not just pure engineer, I also have a "social skill", which often makes me the person responsible for communication with customers during software development and is fully profitable for my projects.

I was involved in several projects, where not only my programming skills, but also my graphics designing abilities were used. I designed animations, created application layout and skins. These kinds of tasks also give me a lot of satisfaction.

I am open to new technologies and I like challenges. I am very communicative and experienced in work in group. I also like to travel and have no problems with adjusting to the new working environment, which I already experienced by spending some time in South Korea or in Bangalore, India.

Skills:

- C, JNI, Java
- MHP knowledge
- STB hardware knowledge (Broadcom and ST chipsets)
- C++, Qt (3.x.x and 4.x.x)
- PHP, JS, Visual Basic, Flash, HTML
- Perl
- UML
- Java EE, Java Server Faces including RichFaces, Ajax, Seam Framework.
- SQL databases
- IDEs: Eclipse, KDevelop, MS Visual C++, JEdit
- Knowledge of, and experience in full project lifecycle.
- Defining user requirements.
- Creating software specification.
- Planning software development.
- Defining test cases and writing testing applications.
- CMMI knowledge.
- Agile software development knowledge.
- Knowledge of JIRA and Bugzilla bug tracking systems.
- Knowledge of Clear Case, CVS, Source of Site, SVN, GIT code repository.
- Designing business layer of applications and working up mathematical algorithms.
- Knowledge of graphic design software: Adobe Photoshop, Illustrator.
- Drawing skills.

Detailed professional career / projects portfolio:

Senior Embedded Software Engineer,

Alticast GmbH

01.2010 - till now (4 years, 7 months)

- Implementation of porting layers for different hardware platforms (stb, tv)
- Integration of multi layer software (drivers, middleware, applications)
- Development of MHP applications (C, Java, JNI)
- Implementation of VOD library (C)
- Field tests and international customer support (Mediaset in Italy, TP Vision in India, TVP Poland)
- Writing tests and tools for better work performance

Embedded Software Engineer,

Vidiom Systems (company transformed from Osmosys Technologies),

08.2009 – 12.2009 (4 months)

Vidiom Systems was a company providing technology solutions for the digital television market, which includes software and hardware necessary for the provision of services related to the transmission of digital terrestrial television, cable, satellite and IPTV.

Content Management System

2009

Server side application, allowing to manage any content (in particular Video On Demand content and Set Top Boxes applications), based on CableLabs® Asset Distribution Interface and VOD specification.

My responsibilities:

Implementation of assets creation and upload logic. Designing and developing Graphical User Interface.

Hardware:

PC

Used technologies:

jBoss, Java Enterprise Edition, PostgreSQL, Java Server Faces (including RichFaces), Seam Framework, Ubuntu.

Software Engineer,

Osmosys Technologies,

11.2006 — 08.2009 (2 years 8 months)

Osmosys was the was company developing open standards interactive TV solutions and one of world's leading providers of MHP - open middleware for interactive television.

I worked there as C and Java embedded software developer, mainly focused on graphics development tasks.

As a person who has artistic sensitivity, skills and ideas, I was also responsible for visual aspect of applications.

Hercules

2006

Proof of concept for high level pseudo 3D graphic library for set top boxes, which used blitter to perform drawing.

My responsibilities:

Main goal was to find a way, how to access blitter and to use it in the optimal way. Then use it to implement example animations and effects to prove that graphic on set top boxes may be working quick and smoothly. Project was successful and gave rise to another project: called EGG.

Hardware:

embedded (set top boxes based on ST)

Used technologies:

C, Java

EGG (Enhanced Graphic enGine)

Hardware:

Used technologies:

EGG – based demo application for IBC 2007 exhibition

Hardware:

Used technologies:

EGG Navigator

Hardware:

Used technologies:

Porting EGG for Broadcom

Hardware:

Used technologies:

TV Manager, EGG support

Hardware:

Used technologies:

2007

EGG was a transformational graphics library that allows video content creators and designers alike the freedom to provide interactive TV graphics, with fluid motion, 3D effects and a full suite of animation options on platforms that were previously limited to a 2D world only.

My responsibilities:

I took part in the whole development process, starting from designing API, then implementation, mainly of the drawing commands and drawing queues. Also implementation of performance tests to monitor library efficiency.

embedded (set top boxes based on ST)

C, JNI, Java

2007

Application for set top boxes, introducing EGG to STB navigating middleware. Application was very successful on IBC 2007 exhibition; rated as one of top 3 must-see innovations.

My responsibilities:

Design and implementation of animations and effects in the application.

embedded (set top boxes based on ST)

Java, C, EGG

2007 - 2008

Navigator is middleware application for digital recorders, allowing the end-user to intuitively install, operate and manage the set top box. We introduced EGG into it, to provide 3D graphics and animations and make their creation easy for developers.

My responsibilities:

Taking part in architecture design process. Implementation of graphic manager, responsible for managing graphic surfaces and memory usage. Also design and development of set of animations and effects built into the library.

embedded (set top boxes)

Java, EGG

2009

As a member of a team responsible for porting, I was mainly liable for performance issues and cross-platform performance measurements.

embedded (set top boxes based on Broadcom platform)

Java, C

2009

Wide-understood customer support for EGG. In parallel EGG Navigator features improvement (including some changes in Tattoo application). Implementation of new TV Manager layouts (for example: Carbo skin)

embedded (set top boxes)

Java

Embedded Software Developer,
BenQ Mobile Wroclaw,
08.2006 — 10.2006 (3 months)

BenQ in Wroclaw was company developing software for mobile phones produced in Germany for European market.
Short period of employment due to company bankruptcy.

Diamond

2006

Diamond was a mobile phone in which development I was engaged.

I was member of settings team.

My responsibilities:

Implementation of PIN and PUK functionality.

Hardware:

embedded (mobile phones)

Used technologies:

C++, APOXI

Embedded Software Developer,
Pruftechnik Technology,
09.2004 — 08.2006 (2 years)

Pruftechnik Technology is company developing software for laser-based measurement devices produced for industry in Germany.

Levalign

2004 - 2006

Levalign is embedded platform application, responsible for flatness and straightness measurements using laser based measurements methods.

Two people in project.

The device with this software has been awarded by the Plant Engineering magazine (first place in Poland, second in USA).

My responsibilities:

I took part in the complete application design and development process:

- user requirements specification
- application architecture design
- application GUI design
- implementation
- units and functionality tests for business classes

I also was an author of mathematical algorithms to calculate optimum surface, basing on different amount, position and measurement results of measured points.

Hardware:

embedded devices (ULTRA)

Used technologies:

C++, Qt 3.11

Shaftalign

2006

Shaftalign is embedded platform application, used for laser shaft alignment.

The device with this software has been awarded by the Plant Engineering magazine (first place in Poland, second in USA).

My responsibilities:

I was responsible for bug fixing and missing functionality implementation.

Hardware:

embedded devices (ULTRA)

Used technologies:

C++, Qt 3.11

Webscan Plus

2006

Webscan Plus is PC application used in paper mills for monitoring paper line with video cameras.

My responsibilities:

Design and development of application. GUI implementation.

Main challenges were high performance with big amount of cameras and grayness analysis.

Hardware:

PC

Used technologies:

C++, Qt 4.xx

Developer,

**Lower Silesia Voivodship Office – Informatics Department,
01.2004 — 09.2004 (9 months)**

Department responsible for agency computerization. Also outsourcing for sheriff court.

My tasks were:

- designing and developing software tools for administration,
- IT administration tasks in sheriff court, responsible for land register.

Education:

- 1999-2003:** Wroclaw University Of Technology, Faculty of Fundamental Problems of Technology, Computing Engineer, Diploma from cryptography: "Data Cipher Using Chinese rests theorem (and hiding them in medias.)".
- 1995-1999:** High School No.VII in Wroclaw

Languages:

- Polish:** native
- English:** IELTS certified (6.5 points)
- German:** basic (spoken and written)

Awards:

- IBC 2007 award for innovation (3-rd place)** EGG™ – Enhanced Graphical enGine. The break-through technology invented in Osmosys by Chris Thornborrow, allowing for smooth 3D-like animations expressed in OpenGL-like API on the platforms with 2D hardware support. Role: project member, animation designer.
- Plant Engineering Magazine award** I played significant role in "Levalign" (flatness and straightness measurement application) software development, which is part of measurement device.
The device got first prize of Plant Engineering magazine in Poland and second prize in USA.

Additional information:

- Interests:** Painting (digital and traditional), snowboarding, science fiction and fantasy novels, games, gliders.
- LinkedIn profile:** <http://www.linkedin.com/in/annakulakowska>