# Károly Szántó

## Personal Data

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| Place of Birth: | Popesti, Bihor, Romania |
| Date of Birth: | 14th of July 1985 |
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## Work Experience

**February 2013 — Present**

### Technical Manager at 3Pillar Global, Timisoara, Romania

A leading technology services provider and software product development company.

I am currently working as a Technical Manager (TM) on native mobile technologies. I have been leading a team of 14 people (devs & QA) developing a couple of native Android & iOS newsreader applications for The Telegraph. My role as a TM is split as Technical Lead (TL) for the Android team (70% of my time) and as a Manager of the entire team (30% of my time) while the technical leading role for the iOS team is coverd by another team mate. Some of the responsibilities I have as a technical manager include: coordinating a team (dev & QA), overall architecture of the system, constant communication with the client to make sure we are building both the right product & the product right, actual task development, yearly reviews of the people I work with, mentoring, coaching, involvement in company level decions, etc. Throughout the engagement with The Telegraph, we have successfully released two apps: The Telegraph Daily UK Edition (iTunes, Google Play, Amazon) & Telegraph Live News Mobile App (iTunes, Google Play)

I have recently started to develop my skills as a public speaker. One of my achievements was delivering a speach/workshop at MobOS http://romobos.com/3rd-edition/speakers, promoting the reactive programming paradigm as a revolutionary way to develop Android apps.

Before this engagement, I was involved in a short collaboration for an Android project with Geico. My first assignment as a technical lead was a project is a Microsoft SharePoint client implemented natively on both Android and iOS platforms.

**August 2012 — February 2013**

### Senior Software Engineer at 3Pillar Global, Timisoara, Romania

As my second in 3PG I was involved in the development of Spring Data SimpleDB, an in-house opensource project. The Spring Data SimpleDB module aims to provide a familiar and consistent Spring-based programming model for Amazon SimpleDB while retaining domain-specific features and capabilities. Key functional areas of Spring Data SimpleDB are a POJO centric model for interacting with a SimpleDB domains and easily writing a Repository style data access layer.

*GitHub (https://github.com/3pillarlabs/spring-data-simpledb)*

As a first assignment in the company, I have worked as a Senior Software Developer on a market inteligence project employing several Java technologies in the backend (Hibernate, Google Guice, Apache Shiro) and JavaScript technologies in the frontend (jQuery, Backbone, Bootstrap). I have been responsible with development of modules both in the backend and the frontend.

**February 2012 — July 2012**

### Programmer at noitso, Copenhagen, Denmark

A company focused on delivering business-critical IT solutions, helping companies to optimize their workflows.

At noitso I worked as a developer focused on C# and ASP.NET and a few technologies .NET, ADO.NET Entity Framework, Windows Workflow Foundation

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| FEBRUARY 2011<br>JULY 2012 | **Programmer at** PIT LAB, IT University of Copenhagen |

The Pervasive Interaction Technology Laboratory hosts research projects run by the faculty of the IT University of Copenhagen and collaborating institutions.

My main responsibilities in the lab were to fulfill technical tasks in the MONARCA Project, being constantly involved in the development, maintenance and testing of the *Android client application*, the *infrastructure* (including server management) and of the *web application*. The central infrastructure consists of a server running couchDB, and apache server. Each user has an Android enabled device running the client application and a mobile version of the couchDB, linked to the couchDB instance running on the central server.

Besides the MONARCA Project, I was also involved in ad-hoc programming tasks, as help in other projects was required.

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| AUGUST 2010<br>MAY 2007 | **Software Developer at** OCÉ srl, Timisoara, Romania |

Océ, Netherlands based company, is a leading international provider of innovative digital printing systems, software and services for the production, reproduction, distribution and management of documents. Supporting the workflow solutions are Océ digital printers and scanners, considered the most reliable and productive in the world.

*Tcl/Tk developer*

Responsible for the development and maintenance of a tool used for automated execution of test cases. The tool and the associated scrips are developed in Tcl/Tk. Also part of the responsibilities was the update of the project documentation: design papers, interface descriptions and user manuals.

*Java developer*

Part of the team developing the graphical user interface for the touch-screen based Océ printers. Enhanced the functionality and refactored existing code. Responsible with the development of graphical elements and custom *Swing* components.

## PUBLICATIONS

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|---|---|
| 2013 | Designing mobile health technology for bipolar disorder:<br>*a field trial of the monarca system*<br>(available on ACM) |

Jakob E Bardram, Mads Frost, Károly Szántó, Maria Faurholt-Jepsen, Maj Vinberg and Lars Vedel Kessing. Designing mobile health technology for bipolar disorder: a field trial of the monarca system. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. 2013, 2627–2636

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| 2012 | The MONARCA Self-assessment System:<br>*a persuasive personal monitoring system for bipolar patients*<br>(available on ACM) |

Jakob E Bardram, Mads Frost, Károly Szántó and Gabriela Marcu. The MONARCA self-assessment system: a persuasive personal monitoring system for bipolar patients. In Proceedings of the 2nd ACM SIGHIT International Health Informatics Symposium. 2012, 21–30

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| 2011 | The MONARCA Self-assessment System:<br>*Persuasive Personal Monitoring for Bipolar Patients*<br>(available on IEEEXplore) |

M Frost, G Marcu, R Hansen, K Szaanto and J E Bardram. The MONARCA self-assessment system: Persuasive personal monitoring for bipolar patients. In Pervasive Computing Technologies for Healthcare (PervasiveHealth), 2011 5th International Conference. 2011, 204-205

## Education

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| SEPTEMBER 2010<br>AUGUST 2014 | Master of Science in IT, Software Development and Technology<br>IT University of Copenhagen, København, Denmark<br><br>Specialisation: Pervasive Computing<br>Thesis: An Environment Simulator for Mobile Context-Aware System Design<br>Thesis Project: EgoSim (https://github.com/ksza/EgoSim) |
| 2004<br>2009 | Diploma Engineer in Systems Engineering and Computers Engineering,<br>"Politehnica" University of Timisoara, Romania, College of Automation<br>and Computers.<br><br>Thesis: Automation of Complex Design Flaws Detection. An Eclipse plug-in which detects<br>design problems in projects and gives restructuring hints based on design patterns. |
| 2000<br>2004 | Class of Mathematics-Informatics at the "Mihai Eminescu" National<br>College, Oradea, Romania.<br><br>Project: File Manager Application (https://github.com/ksza/KNavigator). A clone of<br>the well known DosNavigator file manager |

## Certifications and Trainings

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| JANUARY 2010 | Sun Certified Programmer for the Java 2 Platform, Standard Edition 6.0. |
| 2007 | Test and Validation course, by Océ. |
| 2005 | Attended and successfully graduated the first Cisco Certified Network<br>Associate module. |

## Undertaken Projects

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| AUGUST 2015 | **Peggy - Your personal assistant while Biking, Running or Driving**<br>Play Store:(https://play.google.com/store/apps/details?id=com.ksza.peggy)<br>Peggy is your personal assistant while you are engaged one of the activities which are<br>part of your daily routine: biking, running or driving. If you receive a phone call and<br>you miss it or reject it and if Peggy detects you are engaged in one of the activities<br>listed above, Peggy will automatically send an SMS to the caller with a custom message<br>configured for each type of activity. |
| FEBRUARY 2012<br>JUNE 2012 | **Realms - Creating Location-Based Services through Configuration**<br>Paper: (http://itu.dk/people/ksza/reports/realms_project_report.pdf)<br>Code:(https://github.com/ksza/itu_realms_project)<br>Deployed App:(http://nexgsd.org:8080/realms_configurator)<br>An an end-user programming system - Realms - that allows users to augment physical<br>locations with digital information. With Realms, users can augment physical locations<br>with information through a web-interface centered around a simple map. The informa-<br>tion is thereafter made available on the mobile phone application depending on basic<br>rules and the behavior of the mobile phone user. |
| SEPTEMBER 2011<br>DECEMBER 2011 | **Electronic Announcement Board**<br>Code:(http://subversion.assembla.com/svn/jsf2_websop/trunk/web_shop_spring)<br>Deployed App:(http://130.226.142.171:9080/shop_spring) |

Developed using the following Java-based technologies and frameworks: JSF 2.1, Hibernate, Spring 3.

"LaPizzeria" webshop

(https://bitbucket.org/KarolySzanto/lapizzeria_jsp)

(https://bitbucket.org/KarolySzanto/lapizzeria_jsf)

A web application developed for didactic reasons, using Java-based technologies and frameworks: Servlet and JSP, JSF and Hibernate. The applications were deployed in Tomcat.

Jolie
*Java Orchestration Language Interpreter Engine*

(http://www.jolie-lang.org)

A programming language based upon the service-oriented programming paradigm, suitable to create new services from scratch or to compose existing ones in order to obtain new functionalities.

I have contributed to this project implementing a few missing operators (+=, -=, /=, *=) and implementing a new communication protocol based on JSON-RPC.

JCAF
*The Java Context-Awareness Framework*

Code: (https://sourceforge.net/projects/jcaf)

Paper: (http://sourceforge.net/projects/jcaf/files/documentation/RESTful_jcaf_for_Android.pdf)

Context-awareness is a key concept in ubiquitous computing. JCAF is a Java-based context-awareness infrastructure and programming API for creating context-aware applications on the J2SE platform. I have extended the framework to support the development of context-aware applications on the Android platform by implementing a communication mechanism based on RESTful web services (using Restlet), as an alternative to the existing RMI based communication. I demonstrated my work with an Android application written on top of the extended framework.

Bicycle Shop

(https://github.com/ksza/Bicycle-Shop)

An IT solution for a fictive bicycle shop enabling users to easily create custom bicycles from available parts. Invoking a model driven approach, the application was developed as several Eclipse plugins, making use of EMF, GMF, XText and XPand.

Fluid Photo Browser
*A multi-device photo browser*

(https://github.com/ksza/Fluid-Photo-Browser)

The application enables users to move photos from smart phones, holding personal information, to a shared/public tabletop where many people can browse the photos all together

Kigun
*A dental cabinet management project*

The project is built upon the Apache Felix framework (an open source implementation of the OSGi Release 4 core framework specification) using the following technologies: Hibernate, Swing, JasperReports

The team has three members (including myself) working from different geographical locations, practicing agile development.

Mini Java compiler

(https://github.com/ksza/MiniJavaCompiler)

Mini Java is a subset of Java. The compiler is written Java using the JavaCC parser generator.

2007 | Download Accelerator

(https://github.com/ksza/DownloadAccelerator)

A client-server application written in standard C, under Unix. The application offers the possibility to pause and resume a download. The client can download from multiple servers simultaneously.

YAGLE

(https://github.com/ksza/Yagle)

On-line multiplayer arcade games. Written as a Java client-server application.

2005 | Adolix Wallpaper Changer

(https://github.com/ksza/Adolix-Wallpaper-Changer)

A desktop wallpaper manager, written in Delphi (http://www.adolix.com/wallpaper-changer).

## Technical Skills

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| PARADIGMS | Object-Oriented, Functional, Aspect-Oriented, Data-Driven, Reactive |
| EXPERIENCED | Android, Java, Javascript |
| CAN MANAGE | C#, Delphi |
| ENCOUNTERED | C, C++, Tcl/Tk, Ruby, Scala |
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| TECHNOLOGIES | AspectJ, couchDB, Flayway, Hibernate, JSF, JSP, MongoDB, MySQL, nginx, PostgreSQL, ReactiveX, Spring-Boot, Swing, Vagrant |
| AUTOMATION | Appium, Espresso (Android), Selenium |
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| OTHER | Knowledge of Eclipse plug-in development environment and model driven development technologies (EMF, GMF, XText, XPand) Intermediate knowledge of LaTeX HTML, CSS, jQuery.js, Backbone.js, Bootstrap.js, require.js |

## Languages

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| ROMANIAN | Mothertongue |
| HUNGARIAN | Fluent |
| ENGLISH | Fluent |

## Abilities and aptitudes

Ability to work under pressure. Creativity, initiative and the ability to work both independently and as part of a team. Good sense of humour.

## Interests and Activities

I enjoy sports, playing different kind of musical instruments (guitar and didgeridoo), traveling and culinary arts.

## About this CV

This Curriculum Vitae is written in LaTeX. You can find the source code on GitHub at https://github.com/ksza/Curriculum-Vitae.

# References

Available upon request.