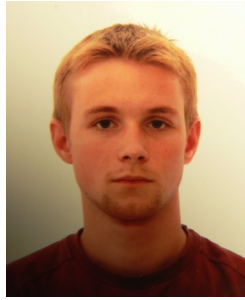


# Curriculum Vitae



First name & Surname

**Tomáš Pop**

Nationality

Czech (Czech Republic)

Contact and more information

<https://www.linkedin.com/in/tomas-pop-95363a55>, [tomas.pop@seznam.cz](mailto:tomas.pop@seznam.cz), [tpcz.cz](http://tpcz.cz)

Summary

R&D software engineer and former researcher in computer science with a strong implementation experience. Specialties: mobile devices, embedded systems, system programming. Passion for mobile & embedded systems design, system integration and optimization, former strong interest in adaptive/context aware software architectures.

## Education and training

Degree & dates

**PhD degree** (awarded by title Ph. D. in September 2013)

Organization

Charles University in Prague (UK), [www.cuni.cz](http://www.cuni.cz)  
- Faculty of Mathematics and Physics (MFF UK), [www.mff.cuni.cz](http://www.mff.cuni.cz)  
- Department of Distributed and Dependable Systems, [www.d3s.mff.cuni.cz](http://www.d3s.mff.cuni.cz)

Principal subjects

Computer Science / Software Engineering (Component systems, Adaptive/Context-aware architectures, Embedded and Mobile Devices)

Ph. D. thesis title and topic

"Components and Services in Resource Constrained Environments" ([link](#)), focus on embedded and mobile environments.

Degree & dates

**Masters and Bc. degree** (Bc. in 2006, Mgr. In 2008, RNDr. in 2011)

Organizations

Charles University in Prague, Faculty of Mathematics and Physics ([www.mff.cuni.cz](http://www.mff.cuni.cz)), Master Thesis at Mälardalen Research and Technology Centre, Sweden, ([www.idt.mdh.se](http://www.idt.mdh.se))

Principal subjects

Computer Science / Software Engineering / Programming (Grammars, Data Structures & Algorithms, Discrete math, Graph theory, Math logic, Enumerability, Complexity, Probability, Statistics, Programming).

Master and Bc. theses

"The PROGRESS Runtime Architecture" ([link](#)), "Cryptography and its application in secure data transfer" (in Czech, [link](#))

## Work experience

Position

**Firmware engineer - connectivity & security**

Dates & Organization

09/2016 onwards. Electrolux GC&T, Connectivity. Czech Republic, [electroluxgroup.com](http://electroluxgroup.com). Reference person: Lukas Kencl.

Responsibilities

Firmware connectivity board development, mobile connectivity SDK, apps.

Position

**R&D Android full-stack engineer**

Dates & Organization

2016. Avast! Anti-virus, Czech Republic, [avast.com](http://avast.com). Reference person: Pavel Petrek.

Responsibilities

Android full-stack (low level observers, kernel, applications)

Position

**R&D software engineer for mobile devices**

Dates & Organization

2013 – 12/2015, Sensirion A.G., Laubisruetistrasse 50, 8712 Staefa ZH, Switzerland, [sensirion.com](http://sensirion.com). Reference person: Moritz Koehler.

Technologies and languages

Android, Java, Android HAL, C, Linux, Python, Linux kernel, Qualcomm DSP

Responsibilities	<p>Research, prototyping and implementation of software components needed for sensor integration into mobile, embedded and IoT devices.</p> <ul style="list-style-type: none"> <li>- Android integration (including HAL extensions, services, applications)</li> <li>- Drivers (Linux, Qualcomm DSP) and low-level/streaming algorithms.</li> <li>- Device interaction logic with Sensirion servers (<a href="#">example web application</a>)</li> <li>- Customer-side support in Asia and United States, 3 months in Sensirion US</li> <li>- Intense work e. g., with Galaxy S4, Note 3 (humidity/temperature sensor)</li> </ul>
Position	<b>Researcher and teaching assistant at D3S MFF UK and RDC CVUT</b>
Dates & Organization	2008 – 2013, part of PhD studies. Charles University in Prague, Department of Distributed and Dependable Systems ( <a href="http://www.d3s.mff.cuni.cz">www.d3s.mff.cuni.cz</a> ), R&D Center for Mobile Applications, Czech Technical University, Prague ( <a href="http://www.rdc.cz">www.rdc.cz</a> )
Technologies and languages	C, Java, Python, Android, Linux, Solaris, eCos RTOS, xml-rpc, SS7, ...
Selected Projects	<ul style="list-style-type: none"> <li>- <i>SOFA HI</i>: Modification of a component system for embedded devices</li> <li>- <i>The PROGRESS Runtime Architecture</i> (ProCom RT environment)</li> <li>- <i>Amobisense</i>: Context sensing/data collection platform for Android system</li> <li>- <i>SS7Box</i>: Live GSM Network signaling tool</li> </ul>
Teaching and tutoring	Advisor of 5+ Master and Bachelor theses . Assistant at University (Introduction to Unix, Recommended Programming Practices, Web development, C# and .NET Technology, Cloud technologies – AWT part)
Notes	Links to publications, sources and project details are listed in appendix and my in Ph. D. thesis ( <a href="#">link</a> ).
Former Positions	<b>Web application developer, Outdoor Sports Instructor</b>
<b>Language Skills</b>	- Czech (native). English (full professional prof.), German (professional prof.).
<b>Personal Interests</b>	Sports (climbing, running, MTB, orienteering, adventure racing), science, traveling, culture. Member of the Czech Red Cross (Czech amateur first aid representation team in 2004 and 2008 in First Aid Convention Europe).

## Appendix A – Selected Publications (full list [scholar.google.com/citations?user=HI2N7-gAAAAJ](https://scholar.google.com/citations?user=HI2N7-gAAAAJ))

(1) Michal Ficek, Tomáš Pop, Kateřina Dufková, Petr Vláčil, Lukáš Kencl, Martin Tomek: **Performance Study of Active Tracking in a Cellular Network using a Modular Signaling Platform** . MobiSys 2010.

(2) Petr Hošek, Tomáš Pop, Tomáš Bureš, Petr Hnětynka, Michal Malohlava: **Comparison of Component Frameworks for Real-time Embedded Systems** . CBSE 2010, extension accepted for publication in Knowledge and Information Systems (KAIS)

(3) Tomáš Pop, František Plášil, Matěj Outlý, Michal Malohlava: **Property Networks Allowing Oracle-based Mode-change Propagation in Hierarchical Components**. CBSE 2012

(4) Michal Ficek, Pop.T, Lukáš Kencl: **Active Tracking in Mobile Networks: An In-depth View**, Accepted for publications in The International Journal of Computer and Telecommunications Networking (COMNET), 2013

## Appendix B – Published code with my contribution

Although most of my work remains internal and IP protected, I contributed to several publicly available apps:

### Android & iOS

- <https://play.google.com/store/apps/details?id=cz.cuni.mff.d3s.Amobisense>
- <https://play.google.com/store/apps/details?id=com.sensirion.ambientsensing>
- <https://play.google.com/store/apps/details?id=com.sensirion.smartgadget>
- <https://play.google.com/store/apps/details?id=com.avast.android.mobilesecurity>
- <https://itunes.apple.com/US/app/id787249829?mt=8>

### Opensource

- My infrequent Linux kernel adventures at [kernelhub](#),
- Some of my older code is at [github](#), [my university profile](#), Sensirion [opensource code](#) and [atmel gallery](#)