

# Andrius Aucinas

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## Education

### **PhD Computer Science, University of Cambridge**      **October 2011 – present**

Main research interests:      Energy efficient communication and computing • Mobile wireless network optimizations • Wireless protocol design and adaptation

Department, group:      Computer Laboratory, Systems Research Group

Supervisor:      Prof. Jon Crowcroft

Featured Projects:

*Kionas*: cloud batteries for the HTML5 Mobile Web Device (With Telefonica I+D, Spain) – HTML5 based platform for communication offloading and batching to a device clone.

*RilAnalyzer*: a Comprehensive 3G Monitor On Your Phone (With Telefonica I+D, Spain) – in-depth on-device analysis of interactions between mobile applications, device radio and the cellular network

*Signpost*: Authenticated, privacy aware, signaling infrastructure for connectivity between named devices

*ThinkAir*: a mobile code offloading framework (With T-Labs, Germany) – compute-intensive application splitting between a mobile device and the cloud for improved performance

### **BA Computer Science, University of Cambridge**      **October 2008 – July 2011**

Degree:      BA Hons, II class part 1

Projects:      *Digital video stabilization, Feature-based image stitching*

### **High School, Vilnius Lyceum, Lithuania**

**September 2004 - July 2008**

## Professional Experience

### **Internship, Telefonica I+D, Barcelona, Spain**      **September 2012 – January 2013**

- Communication offloading for reduced mobile device energy consumption
- Prototyping the system on a HTML5 mobile platform, FirefoxOS
- Characterization of current applications on the Android platform using power measurements and network compliance testing facilities
- Submitting a paper to ACM SIGCOMM as the lead author

Supervisors: Dr. Yan Grunenberger, Dr. Konstantina Papagiannaki

### **Internship, Deutsche Telekom Laboratories (INET), Germany**      **August 2011 – September 2011**

- Conceptualizing multiple ideas related to mobile and cloud computing, next generation cellular networks
- Providing in-depth analysis of the approaches from technological and economical perspectives
- Preparing and submitting a patent application

Supervisor: Dr. Pan Hui

### **Internship, Deutsche Telekom Laboratories (INET), Germany**      **June 2010 – August 2010**

- Leading a project on using cloud computing for performance and energy efficiency of mobile devices
- Implementing majority of the components required for the project
- Collaborating with researchers from a number of institutions (Cambridge, Samsung SISA, Uni. Michigan)

Supervisor: Dr. Pan Hui

**Internship, Computer Laboratory, University of Cambridge (NetOS), UK      June 2009 – August 2009**

- Designing and building a tool for social interaction tracking using mobile device sensors
- Learning practical sensing approaches as well as speaker recognition from voice
- Contributing to a publication at Ubicomp 2010

Supervisors: Dr. Cecilia Mascolo, Dr. Mirco Musolesi

**Internship, UAB “Atea Baltic” (Software Development), Lithuania      August 2009 – September 2009**

- Working in a small team of developers and developing using industry standards
- Working on large-scale business applications and utilities for them

**Olympiads in Informatics      2004 - 2008**

- International (2006, 2008), Baltic (2006 – 2008), National (2004 – 2008) Olympiads in Informatics
- Excellent algorithmic programming skills, superior problem solving skills
- Experience of working under pressure and strict time limits
- Awards at national and international levels (prizes at national Olympiads and bronze medal at Baltics)

**Honours and Awards**

SIGCOMM 2012 and CoNEXT 2013 Student Travel Awards

2011 EPSRC Doctoral Training PhD funding, Deutsche Telekom Laboratories partial PhD funding

2008 Cambridge European Trust scholarship for the period of BA Computer Science studies

2008 UAB “Atea Baltic” sponsorship for the period of BA Computer Science studies in Cambridge

**Publications**

**Staying Online While Mobile: The Hidden Costs**

Andrius Aucinas, Narseo Vallina-Rodriguez, Yan Grunenberger, Vijay Erramilli, Konstantina Papagiannaki, Jon Crowcroft, David Wetherall

In Proceedings of CoNEXT 2013

**RILAnalyzer: A comprehensive 3G monitor on your phone**

Narseo Vallina-Rodriguez, Andrius Aucinas, Mario Almeida, Yan Grunenberger, Konstantina Papagiannaki, Jon Crowcroft

In Proceedings of IMC 2013

**Signposts: End-to-End Networking in a World of Middleboxes**

Amir Chaudhry, Anil Madhavapeddy, Charalampos Rotsos, Richard Mortier, Andrius Aucinas, Jon Crowcroft, Sebastian Probst Eide, Steven Hand, Andrew W. Moore, Narseo Vallina-Rodriguez

In Proceedings of SIGCOMM 2012

**ThinkAir: Dynamic resource allocation and parallel execution in the cloud for mobile code offloading**

Sokol Kosta, Andrius Aucinas, Pan Hui, Richard Mortier, and Xinwen Zhang

In Proceedings of INFOCOM 2012

**EmotionSense: A Mobile Phones based Adaptive Platform for Experimental Social Psychology Research**

Kiran K. Rachuri, Mirco Musolesi, Cecilia Mascolo, Peter J. Rentfrow, Chris Longworth, Andrius Aucinas

In Proceedings of UbiComp 2010

**Other Related Interests and Activities**

Co-organizer of Mobisys’14 PhD Forum – sponsorship, organizing TPC and panel, web chair

Web Chair of ACM E-Energy’14

Organizing the Lithuanian National Olympiads in Informatics (part of the technical committee)

Lecturing, volunteering at the National Students Academy (for gifted and talented youth), Lithuania