Curriculum Vitae, Olli Pottonen, March 28, 2017

CONTACT INFORMATION

e-mail: olli.pottonen@iki.fi *www:* http://www.iki.fi/opottone/
Mobile phone: +61 4 8153 8440

MAIN SKILLS

Strong research background in mathematics and computer science, especially in algorithms and discrete mathematics. Work experience in software engineering and a strong interest in applying algorithms in practice.

SCIENTIFIC PUBLICATIONS

14 refereed journal articles, 2 refereed conference papers, miscellaneous other publications. Up-to-date list available at http://www.iki.fi/opottone/.

WORK HISTORY

Optimisation Specialist at **SilverRail Technologies Australia**
December 2014 to today
- Developing Silverrail journey planner, including algorithms design and other aspects of software engineering

Postdoctoral Researcher at **The University of Queensland**, School of Mathematics and Physics
August 2013 to November 2014
- Applying mathematics to the art of software testing in collaboration with SilveRail Technologies

Software Engineer at **Sandis Solutions Ltd.**
June to September 2012
- Developing and implementing mathematical models, mostly queuing theory

Postdoctoral Researcher at **Universitat Politècnica de Catalunya**, Dept. de Llenguatges i Sistemes Informàtics
April 2011 to April 2012
- Research on graph algorithms and complexity, focusing on the metric dimension problem

Postdoctoral Researcher at **Aalto university**, Dept. of Information and Computer Science
August to December 2010
- Research work, mostly on online algorithms.

Researcher at **Finnish Defence Forces Technical Research Centre**
October 2009 to July 2010
- Research on military operational analysis, mostly development and documenting of mathematical models. Also some other duties such as participating in requirements management.

Researcher at **Helsinki University of Technology TKK**, Dept. of Communications and Networking
January 2007 to September 2009
- Research of error-correcting codes and combinatorial designs with algorithmic and mathematical means.
- Writing doctoral thesis.
- Additional teaching duties and small software projects related to the research.

Mandatory national service at **Finnish Defence Forces Technical Research Centre**
July 2006 to January 2007

- Participation in a military operational analysis research & software development project. My duties were development and implementation of mathematical models.

Research Assistant at **Helsinki University of Technology TKK** May to August 2004, May to December 2005
- Research of combinatorial designs with algorithmic means

Trainee at **Nokia Research Center** September 2000 to May 2002 (part-time)
- Simple programming tasks.

Education

Helsinki University of Technology TKK

Doctor of Science (tech.), information theory **2007 to 2009**
- Thesis: *Perfect binary codes: classification and properties*, pass with distinction
- Advisor: Prof. Patric Östergård
- Major: Information Theory, 32 ECTS credits, grade: pass with distinction
- Minor: Mathematics, 20 credits, grade: pass with distinction

Master of Science (tech.), Engineering Physics, with distinction **2002 to 2005**
- Thesis title: Classification of Steiner Quadruple Systems
- Major: Mathematics, 87 credits, grade: excellent
- Minor: Theoretical Computer Science, 30 credits, grade: excellent

Language skills

Native Finnish.
Fluent English.
Basic level Swedish and German.

Achievements

"Dissertation of the year" award by Aalto University School of Science and Technology[1].
Youngest doctoral graduate in Helsinki University of Technology TKK in 2009.
Top Cited Article in Journal of Combinatorial Theory, Series A, 2005–2010 together with P. Östergård and P. Kaski.
Excellent progress in master level studies rewarded with scholarships by Julius Tallberg's Fund and Helsinki University of Technology, and excellent progress in doctoral studies by Helsinki University of Technology.
Meritorious winner of the 2001 Mathematical Contest in Modeling MCM together with L. Kangas and J. Kokkala.

Grants

My work at Univèrsitat Politecnica de Catalunya was financed by The Finnish Cultural Foundation.
My thesis work is supported by the Graduate School in Electronics, Telecommunication and Automation as well as personal grants from Finnish Foundation for Technology Promotion and the Nokia Foundation.

Other

Erdős-Bacon number: 5 (2 + 3).
Personal best marathon time: 3:50:51.

[1] Formerly Helsinki University of Technology TKK