

## **CURRICULUM VITAE OF PATRIK FLORÉEN, PHD – DECEMBER 2012**

**Full name and contact information:** Patrik Bertel Johan Floréen, tel. 040-5700444, email [patrik.floreen@hiit.fi](mailto:patrik.floreen@hiit.fi), homepage: [www.cs.helsinki.fi/patrik.floreen](http://www.cs.helsinki.fi/patrik.floreen)

**Personal information:** Born 15.5.1964 in Helsinki, Finland. Nationality: Finnish.

**Current positions:** Chief Research Scientist acting as Vice-Director of Helsinki Institute for Information Technology HIIT (part-time), 19.10.2010 – 31.7.2015.

University Lecturer at the Department of Computer Science, University of Helsinki (permanent) since 1.1.2003. University Lecturer is the level just below Full Professor.

Leader of the Adaptive Computing Research Group at Helsinki Institute for Information Technology HIIT, since the group's foundation in 2003.

Docent in Computer Science, University of Helsinki, since 28.12.1995.

**Current research interests:** context-aware mobile services, distributed algorithms and optimization.

**Language skills:** Swedish (mother tongue), Finnish (certificate of complete mastery given by Valtion kielitutkintolautakunta 5.10.1988), English (fluent), French (good), German (satisfactory), Dutch (weak), Latin (very weak).

### **Education/Diploma:**

Doctor of Philosophy in Computer Science, University of Helsinki, 18.12.1992.

Licentiate of Philosophy in Computer Science, University of Helsinki, 29.11.1990.

Separate Diploma in Mathematics (fi: "sivulaudatur," corresponding to the amount needed for a Masters degree when majoring in Mathematics), University of Helsinki, 6.10.1988.

Master of Science in Computer Science (major subject), Mathematics and Physics (minor subjects), University of Helsinki, 26.5.1988.

Matriculation examination, Gymnasiet Svenska Normallyceum, 31.5.1983.

### **Education/Selected other studies and courses:**

Courses in University Pedagogics, 2003 (6 credit units) and 2006 (5 ECTS points).

Studies in Economics and Business Administration, Swedish School of Economics and Business Administration, 1992 – 96, altogether 75 credit units.

Courses in French, Eurocentre de Paris, 1996, and European Commission, Brussels, 1997 – 1998.

Courses in management of universities and public administration, 1995, and in management of research spin-off companies, 1992.

### **Professional experience:**

From 1.1.1986 onwards, I have been full-time employed except for a 9.5 months period in compulsory military service 1990 – 91. Full list of past professional appointments below.

Visitor at German Research Center for Artificial Intelligence (DFKI), Saarbrücken, Germany, 24.9. – 30.11.2012.

Director of Helsinki Institute for Information Technology HIIT, 15.11.2009 – 31.7.2010 and EIT ICT Labs Helsinki Node Director 19.2.2010 – 31.7.2010.

Chief Research Scientist, Helsinki Institute for Information Technology HIIT, 1.8.2009 – 14.11.2009 and 1.8. – 31.07.2015.

Professor (pro tem) in Computer Science at University of Helsinki, 1.1. – 31.7.2009.

Senior Research Scientist and Research Coordinator, Helsinki Institute for Information Technology HIIT, 1.8.2002 – 31.12.2008. The Research Coordinator's scientific and administrative work spans the whole of HIIT (both UH and TKK sides).

Appointed to a permanent position as University Lecturer in Computer Science at University of Helsinki, 1.1.2003.

Professor (acting) in Computer Science at University of Helsinki, 1.8.2001 – 31.7.2002.

Scientific Officer at the Directorate General for Research, European Commission, Brussels, 1.5.1997 – 31.1.2002. Working in the unit for Marie Curie fellowships, in the unit for Mobility Policy and directly with the Resource Director on the implementation of the Commission's financial reform in DG Research. On leave 1.8.2001 – 31.1.2002.

Secretary General (i.e. Director) for the Research Council for Natural Sciences and Engineering, Academy of Finland, 1.1.1995 – 18.5.1997. The Secretary General was heading the unit responsible for the preparation and execution of the decisions of the research council. Member of the Academy's board on science policy. Finnish delegate to the EU DGXII/Training and Mobility of Researchers (TMR) programme committee.

Earlier positions in Computer Science at University of Helsinki:

- (Acting) Assistant Professor (fi. yliassistentti) 1.2. – 30.6.1994 and 16.9. – 31.12.1994.
- Senior Researcher 1.1. – 31.7.1993 in the project Reasoning by Examples (REX) led by Henry Tirri and financed by the Technology Development Centre (TEKES).
- Researcher 1.1. – 31.12.1992 in the project Theory and Programming of Neural Networks led by Prof. Pekka Orponen and financed by the Academy of Finland.
- Researcher 18.5. – 31.12.1991.
- Appointed to the position as Assistant 1.1.1989 – 31.12.1994, however, I never acted in this position.
- Research Assistant 1.1. – 31.12.1988 and researcher 1.1.1989 – 6.8.1990 in the project Algorithms and Complexity led by Dr. Pekka Orponen and financed by the Academy of Finland.
- (Acting) Assistant 1.8.1986 – 31.12.1987.
- Full-time teacher 1.1. – 31.7.1986.
- Part-time teacher 1985.

At Helsinki University of Technology: Researcher 1.7. – 15.9.1994 at the Department of Computer Science with the task to plan and set up the Helsinki Graduate School in Computer Science and Engineering (HeCSE).

At Utrecht University, the Netherlands: Postdoctoral Researcher 1.8.1993 – 1.2.1994 at the Department of Computer Science in the research group of Prof. Joost N. Kok. Salary paid by Utrecht University.

Part-time teacher in mathematics at University of Helsinki, 1985 – 1987.

High-school teacher in chemistry at Gymnasiet Svenska Normallyceum, 7.9. – 30.9.1983. Also teaching mathematics and physics on several occasions during 1983 – 84.

**Received research funding as scientist in charge (lately about 300 000 € per year, in total over 2 million €):**

Data to Intelligence (D2I) SHOK programme, Tekes, May 2012-. Academic coordinator of the workpackage "Methods, Algorithms". At University of Helsinki, the formal leader is Professor Petri Myllymäki.

VISCI TOOLS, Tekes Tila programme, 1.1.2010 – 31.12.2011, 153 594 € (together with Professor Petri Myllymäki; Myllymäki formal site leader), of which Tekes funding 86% of the external funding, the rest from companies; sister project to VISCI.

Local Distributed Algorithms, Academy of Finland, 1.1.2010 – 31.12.2012, 331 000 €

Adaptive Interfaces for Consumer Applications (AICA), Tekes Ubicom programme, 1.10.2009 – 31.12.2011, 356 920 € (together with Professor Petri Myllymäki; me formal site leader), of which Tekes funding 89% of the external funding, the rest from companies. Acting as consortium coordinator.

Virtual Intelligent Space for Collaborative Innovation (VISCI), Academy of Finland, MOTIVE research programme, 1.1.2009 – 31.12.2012, 310 310 € (together with Professor Petri Myllymäki; Myllymäki formal site leader). Other partners of the consortium (not included in the amount mentioned): research groups of Prof. Kristiina Kumpulainen, UH Pedagogics, and Prof. Riitta Smeds, Helsinki University of Technology.

Local and User-CREated services (LUCRE) as part of the ICT SHOK programme Flexible Services, Tekes; 1.6.2008 – 31.12.2010, 90 454 €

Widgets Sharing activity of the ICT SHOK programme Future Internet, Tekes; 1.6.2009-31.12.2010, 106 987 €

Widgets Sharing (WiSh), 1.9.2007 – 31.12.2007, contract through TKK with Nokia Research Centre, 18 550 €

Personalised Ubiservices in Public Spaces (PUPS), Tekes Ubicom programme, 1.8.2007 – 30.11.2009, 400 750 € (together with Professor Petri Myllymäki; me formal site leader), of which Tekes funding 80% of the funding, the rest from companies. Acting as consortium coordinator.

Optimising Data Gathering in Resource-constrained Networks (Geru), Academy of Finland, 1.1.2007 – 31.12.2009, 128 400 €

Semantic Interpreter Widened Experience (STEPWISE), contract with Nokia Research Centre, 1.9.2006 – 31.8.2007, 127 500 €

Trust4All Trust Modelling and Management, System Design/Development (Trust4All), subcontractor of Nokia Research Centre as part of the Trust For All (Trust4All) Eureka/ITEA-project, 1.10.2005 – 31.12.2007, 222 700 €

Mobile Life (MobiLife) Integrated Project, EU FP6 IST project, European Commission, 1.9.2004 – 31.12.2006, 396 404 € Coordinator was Nokia. I was task leader of one of the tasks in the project.

Networking and Architecture for Proactive Systems (NAPS) – Algorithmics, Academy of Finland, PROACT research programme, 1.1.2003 – 31.12.2005, 130 000 € Acting as consortium coordinator. Other partners of the consortium (not included in the amount mentioned): research groups of Prof. Pekka Orponen and Prof. Jorma Virtamo, Helsinki University of Technology.

Space4U Terminal Software Management System Design/Development (Space4U), subcontractor of Nokia Research Centre as part of the Software Platform and Component Environment 4 You (Space4U) Eureka/ITEA-project, 1.7.2003 – 31.6.2005, 165 000 €

### **Supervised PhDs:**

Petteri Nurmi: "Identifying Meaningful Places," dissertation at University of Helsinki 24.10.2009.

Jukka Suomela: “Optimisation Problems in Wireless Sensor Networks: Local Algorithms and Local Graphs,” dissertation at University of Helsinki 13.6.2009.

Current PhD students: Sourav Bhattacharya (since Dec 2009), Teemu Pulkkinen (since Dec 2011), Taneli Vähäkangas (since Jan 2010).

**Duties as scientific expert:**

Opponent at the PhD dissertation of Torben Godsk, Århus University, Denmark, Dec 2011.

Pre-examiner of André Schumacher’s PhD Thesis at Aalto University, Sep 2010.

Evaluation of Dr. Harri Haanpää for appointment to Adjunct Professor (Docent) at Helsinki University of Technology TKK, Nov 2009.

Evaluation of Dr. Fernando Ordoñez for promotion to Associate Professor at Universidad de Chile, Aug 2008.

Reviewer of the Licentiate of Philosophy thesis of Sasu Tarkoma at University of Helsinki, May 2005.

Infotech Oulu Advisory Board member 2012-2015.

Member of the Editorial Board of Computers (open access journal, MDPI AG), since it start in 2011.

Member of the Board of Helsinki Graduate School in Computer Science and Engineering (Hecse), autumn 1994 and autumn 2001 – spring 2002, and 2007–11. Member of the Board of the Future Internet Graduate School (FIGS) since 2009.

Member of the Joint Pervasive-UbiComp Steering Committee since its establishment in May 2011. The JSC is the deciding body for the Pervasive and UbiComp conferences, the premier conferences in the area of ubiquitous computing.

General Chair of the 8<sup>th</sup> International Conference on Pervasive Computing (Pervasive 2010), Helsinki, Finland, 17 – 20 May 2010 [a major conference in the area with 16% acceptance rate and 340 participants].

Chairman of the Organizing Committee and member of the Programme Committee for the 1<sup>st</sup> Workshop on Context Awareness for Proactive Systems (CAPS 2005), Helsinki, Finland, 16–17 June 2005.

Co-chairman of the Organizing and Programme Committees of the International Workshop on Improved Mobile User Experience (IMUx 2007) in conjunction with Pervasive 2007 in Toronto, Canada, 13 May 2007, and the 2<sup>nd</sup> International Workshop on Improved Mobile User Experience (IMUx 2008) in conjunction with Pervasive 2008 in Sydney, Australia, 19 May 2008.

Chairman of the Organizing Committee for a conference on Research Training in Europe (Snekkersten, Denmark, 29 – 31.5.1997).

Member of the Programme Committee for several international conferences: World Wide Web (WWW2013) track “User Interfaces and Smart (Mobile) Devices”, Rio de Janeiro, Brazil, 13–17 May 2013; European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD 2012), Bristol, UK, 24–28 September 2012; World Wide Web (WWW2012) track “Smart Devices and the Web,” Lyon, France, 16–20 April 2012; International Conference on Wireless Information Networks and Systems (WINSYS2011), Seville, Spain, 18–21 July 2011; 6<sup>th</sup> International Conference on Grid and Pervasive Computing (GPC 2011), Oulu, Finland, 11–13 May 2011; 2<sup>nd</sup>

International ICST Conference on Ambient Media and Systems (Ambi-Sys 2010), Phoenix, Arizona, 2–3 December 2010; International Conference on Wireless Information Networks and Systems (WINSYS 2010), part of the International Joint Conference on e-Business and Telecommunications (ICETE), Athens, Greece, 26–28 July 2010; International Workshop on Pervasive Service Computing and Applications (PSCA 2009), Shanghai, China, 17–19 December 2009; 3<sup>rd</sup> IEEE International Workshop on Context Modeling and Management for Smart Environments (CMMSE'09), Ann Arbor, Michigan, USA, 1–4 November 2009; 4<sup>th</sup> European Conference on Smart Sensing and Context (EuroSSC 2009), Guildford, UK, 16–18 September 2009; International Conference on Wireless Information Networks and Systems (WINSYS 2009), part of the International Joint Conference on e-Business and Telecommunications (ICETE), Milan, Italy, 7–10 July 2009; 7<sup>th</sup> International Conference on Pervasive Computing (Pervasive 2009), Nara, Japan, 11–14 May 2009; 2009 International Workshop on Technologies to Counter Cognitive Decline (TCCD) in conjunction with the 3<sup>rd</sup> International Conference on Pervasive Computing Technologies for Healthcare (Pervasive Health 2009), London, UK, 31 March 2009; 2<sup>nd</sup> IEEE International Workshop on Context Modeling and Management for Smart Environments (CMMSE'08), London, UK, 13–16 November 2008; International Workshop on Context-aware Mobile Learning (CAML'08), Cergy-Pontoise, Paris, France, 27–31 October 2008; IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2008), Cannes, France, 15–18 September 2008; IEEE International Conference on Sensor Networks, Ubiquitous and Trustworthy Computing (SUTC 2008), Taichung, Taiwan, 11–13 June 2008; International Conference on Ambient Media and Systems (Ambi-sys 2008), Quebec, Canada, 11–14 February 2008; 2007 International Workshop on Context Modeling and Management for Smart Environments (IWCMM 2007), Lyon, France, 28–31 October 2007; 2<sup>nd</sup> European Conference on Smart Sensing and Context (EuroSSC 2007), Windermere, UK, 23–25 October 2007; 3<sup>rd</sup> Workshop on Context Awareness for Proactive Systems (CAPS 2007), Guildford, UK, 18–19 June 2007; 2<sup>nd</sup> Workshop on Context Awareness for Proactive Systems (CAPS 2006), Kassel, Germany, 12–13 June 2006; 32<sup>nd</sup> International Conference on Current Trends in Theory and Practice of Computers Science (SOFSEM 06), Merin, Czech Republic, 21–27 Jan 2006.

Expert evaluator for project application in the EU FP7 IST FET Proactive objective Fundamentals of Collective Adaptive Systems (FOCAS), May 2012.

Annual reviewer for the EU FP7 ICT FET project Foundations of Adaptive Networked Societies of Tiny Artefacts (FRONTS), April 2009, March 2010 and May 2011.

Project reviewer for the Czech Science Foundation, Aug 2009.

Expert evaluator for Integrated Project applications in the EU FP6 IST priority strategic objective Cognitive Systems, European Commission, Brussels, April 2005.

Chairman of the review board in Computer Science for funding of research projects (15 May 2002 deadline), Academy of Finland, 2002.

Referee for several scientific journals, e.g., Journal of Systems and Software, ACM/Kluwer Mobile Networks and Applications (MONET), IEEE Transactions on Circuits and Systems I, IEEE Communication Letters, IEEE Transactions on Neural Networks, International Journal of Neural Systems, Natural Computing) and conferences in Computer Science.

### **Scientific talks:**

Guest talks abroad: DFKI (Saarbrücken, Germany), University of Manitoba (Winnipeg, Canada), University of Toronto (Canada), International Computer Science Institute (Berkeley, California), University of Milano (Italy), Ecole Normale Supérieure de Lyon (France), Rijksuniversiteit Utrecht (the Netherlands), National ICT Australia (Canberra, Australia).

Guest talks in Finland: University of Joensuu and Åbo Akademi University.

Tutorials: “Context-awareness” at 15<sup>th</sup> Summer School on Telecommunications, Lappeenranta University of Technology, 2.8.2006.

Talk to the general public about context-aware mobile phones at Heureka Science Centre, Finland, 9.11.2003.

**Other information:**

Elected member of the academy Svenska Tekniska Vetenskapsakademien i Finland, March 2012-.

Most recent interviews: “Mobile Phones & a Cup of Coffee 2.0”, Helsinki University Bulletin HUB 2/10 p. 28-31; University of Helsinki portal news page 17.5.2010: “Always online”, <http://www.helsinki.fi/ajankohtaista/uutisarkisto/5-2010/17-15-17-48>.

Elected personnel representative to the Board of HIIT for the 2-year period 1.1.2007 – 31.12.2008 and substitute to the personnel representative for the period 1.1.2009 – 14.11.2010 (elected for 2 years, but term ended with appointment to Director).

Member of Tutkijoiden ja kansanedustajien seura ry (TUTKAS, Society for researchers and Finnish parliament members) since 2001.

Elected member of the Board of Helsinki Computer Society (fi. Helsingin tietojenkäsittelyyhdistys, about 10000 members), 1992 – 1994.

Elected member of the Federal Assembly of the Finnish Information Processing Association (fi. Tietotekniikan liiton liittokokous), 1993 – 1995.

Chairman of the Board of the software company InvEps Oy, 1991 – 1997.