# Tuomas Airaksinen Curriculum Vitae

## Personal and contact details

Name: Tuomas Antero Airaksinen Date of birth: March 1982 Nationality: Finnish Current position: Tech lead / senior software developer

E-mail: forename.surname at gmail.com Homepage: http://tuomasairaksinen.fi/ Github: https://github.com/tuomas2/ LinkedIn: https://www.linkedin.com/in/tuomasairaksinen/

# Education

- 27.10.2010 Doctor of Philosophy, Computer Science, University of Jyväskylä. Dissertation thesis "Numerical methods for acoustics and noise control".
- 28.4.2006 Master of Philosophy, Physics, University of Jyväskylä. Pro gradu thesis "Numeric fluid flow computing with lattice-Boltzmann method", with grade eximia cum laude approbatur. Major subject: Physics, grade excellent. Minor subjects: Computer science, grade excellent, Mathematics, grade good
- 6.1.2002 Finnish army, Signalist, 6 months (KarPr/2.VK/2001/2)
- 2.5.2001 Matriculation examination with following qualifications: Mathematics, grade *eximia cum laude approbatur*, Physics, grade *laudatur*, Finnish (mother language), grade *laudatur*, English, grade *magna cum laude approbatur*, Swedish, grade *magna cum laude approbatur*.

30.5.1998 Comprehensive school

# Language skills

- Finnish: Native
- English: fluent spoken and written
- Swedish: fair official skills.

# Work history

#### Full time contracts

- 1.4.2017 Tech lead / Senior software developer, Qvantel Finland Oy. Tech lead and senior software developer position in a product development team. Designing and developing order fulfillment backend systems. Technologies: Python 3.6, Flask, AsyncIO, Docker.
- 1.4.2014 31.3.2017 Senior software developer, Qvantel Finland Oy. Python/Django web software development in a large customer project, in telecommunication domain. Agile software development with Scrum and Kanban.
- 28.10.2010 31.3.2014 Postdoctoral researcher at the Department of Mathematical Information Technology, University of Jyväskylä
- **1.5.2006 27.10.2010** Doctoral student, research for Ph. D. thesis and post-graduate studies at the Department of Mathematical Information Technology, University of Jyväskylä
- 16.5.2005 30.4.2006 Research assistant, Research for pro gradu thesis at the Department of Physics, University of Jyväskylä,
- **1.7.2003 31.8.2003** Programming for Hurvana 4 computer game at Veikko Heinonen Ltd. (summer job).

#### Research

See list of publications.

### Teaching

- 11.3.2013 15.5.2013
  - Lectures (4 h) and assignments (16 h), computer graphics course, advanced level course at the Department of Mathematical Information Technology, University of Jyväskylä

#### 12.3.2012 - 28.5.2012

Assignments (8 h), computer graphics course, advanced level course at the

Department of Mathematical Information Technology, University of Jyväskylä

#### 18.1.2005 - 28.4.2005

Lectures (10 h) and assignments (24 h), computer graphics course, advanced level course at the Department of Mathematical Information Technology, University of Jyväskylä

## Software development skills

## • Programming

- Excellent, professional Python 3.6 programming

- Experience in C++ and C programming
- Software design from start to finish
- Excellent team player and nice workmate.
- Web software development: Professional experience with Python, Django framework, Flask, AsyncIO etc.
- Scientific computing skills: Physics simulations with Finite Element method (FEM), Optimization methods (single-objective, multi-objective), 3D graphics, visualization techniques. Comprehensive skills in various scientific computing Python libraries, such Numpy, Scipy etc.