

Curriculum Vitae

16 January 2015

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Work experience

05/2013 - **University of Helsinki**
cur. Research assistant

Continued development of a HIP protocol implementation (<https://launchpad.net/hipl>) and porting it to the Android operating system. Compiled and installed Android to a number of different smartphones and tablets in the process. Experimenting with a mobile offloading system called Cloudlets. Assisted others who were experimenting with the HIP protocol or Cloudlets for various purposes.

Work for a project involving a brokerage and federation infrastructure for cloud services, active participation in local OpenStack user group meet-ups. Instructing with exercises on an advanced level course on overlay- and peer-to-peer networks.

09/2011 - **University of Helsinki**
04/2013 Part-time instructor / Teaching Assistant

Instructing students in basic and intermediate level programming courses and projects, including a course on agile software development. Security was one of the key points in the Database application project course, where students design and implement web services backed by a database.

07/2007 - **G4S Security Services Oy**
10/2013 Security Guard

Patrol duty in the Helsinki metropolitan area. Experience with usage and minor configuration of home- and office security systems, including alarm systems, video surveillance systems and electronic key systems.

Education

08/2007 - **University of Helsinki**
1H/2015 Currently master's studies (MSc).
(exp.) 2012 Bachelor of Science (BSc).
Major in computer science, minors in mathematics and chemistry. A number of security related courses.

07/2006 - **The Finnish Defense Forces**
04/2007 Military police, army

Knowledge of languages

Finnish	Native	Swedish	Satisfactory skills
English	Fluent written and spoken	French	Rudimentary

Skills

Languages

Java, C, PHP, JavaScript, Bash, HTML ; Ability to read and understand many others.

Software

MySQL, PostgreSQL, Linux, OS X, Android (apps and OS level), Git, SVN, Bazaar, Apache2, HIP, OpenVPN, OpenSSH, VNC, BIND, Nagios, QEMU/KVM, VMWare

Code

Github: <https://github.com/scolphoy>

Launchpad: <https://launchpad.net/~scolphoy>

Teaching

Overlay and P2P Networks

Spring 2014, 2015

An advanced level course about different logical networks that are laid on top of traditional IP networks (overlays), peer-to-peer technologies, and related data structures and algorithms.

Intermediate studies project: Database Application

Spring 2012 - Spring 2013, total 7 groups.

An intermediary level project course for designing and implementing a web service, and a relational database to support it. Each assignment needed to have a login facility that could differentiate users, and needed to be resistant against SQL Injection and Cross-Site Scripting attacks.

Programming in C

Autumn 2012

Introduction to the C programming language and standard libraries. At the time I was the instructor, the focus was on the C99 variant. The exercises included implementing a stripped down version of the AES algorithm.

Introduction to Computer Science, Studying techniques

Autumn 2012 (2 Groups)

An introductory overview to the field of computer science, combined with a small course on studying techniques and English language studies.

Software Engineering Lab

Summer 2012, (2 groups)

An intermediate level software engineering project involving a Scrum-like agile method, and usually taken at the end of BSc-level studies. Students from a team, negotiate about the assignment with a customer (faculty or outside) and implement what they can while following the process.

Programming Project

Spring 2012

The first programming project after the introductory programming and software design courses. An individual project assignment is negotiated with each student.

Introduction to Programming and Advanced Course in Programming

Summer, Autumn 2011 (2 iterations of each course)

The first programming courses intended for first year students. Programming in Java.

Presentations

OpenStack in production: Infrastructure for CERN data analysis

Helsinki, Finland, February 2014.

2nd OpenStack Finland User Group meetup.

University of Helsinki / Lirim Osmani, Juhani Toivonen