

Marko Kallio

Mikonkatu 22 E 60
FI-00100 Helsinki Finland
Tel. +358 50 577 0535

marko.k.kallio@aalto.fi / marko@markokallio.fi

<http://markokallio.fi/>

[LinkedIn](#)

CV

12 Jun 2017



Education

Master's in Geoinformatics

Aalto University School of Engineering (Helsinki, Finland), 2014-2016

- GIS techniques (visualization, visual analysis, geostatistics, data mining) and theory
- Specialization in cartography (and information visualization)
- Watershed engineering (and related computational methods), water management
- Thesis title: An Exploration of Water Poverty in Lao People's Democratic Republic.
- Graduated with excellent grades. Received ProGIS Thesis Award for a meritorious thesis in 2016 and Finnish Universities Network on Asian Studies Thesis Award in 2016

Bachelor's in Environmental Engineering

Metropolia University of Applied Sciences (Helsinki, Finland), 2009-2014

- Environmental and atmospheric pollution, environmental chemistry
- Water and waste treatment and renewable energy (incl. biofuels)
- Specialization in International Water Management
- Thesis title: Effects of Mining and Hydropower on Metals in Surface Waters. Case: Nam Ngum
- Graduated with excellent grades and received Vantaan Energia Award for success in studies

Erasmus exchange in International Water Management

HZ University of Applied Sciences (Vlissingen, The Netherlands), 2011-2012

- (Aquatic) ecology and aquaculture
- Dredging and ecological engineering
- Water system analysis, river basin management and Integrated Water Resources Management

Relevant Work Experience

Doctoral Candidate (DSc in Geoinformatics)

Aalto University School of Engineering (Helsinki, Finland), Jan 2017-(2021)

- Work in two research groups: Water and Development, and Geoinformatics
- Doctoral studies including earth observation (remote sensing), systems analysis, decision making
- Participation in CORE initiative (estimation of renewable energy potential in rural and small town communities) in Myanmar, covering the entire country.
- Research on estimating impacts of water scarcity on communities in Mainland Southeast Asia (Monsoon dominated climate). Research is mostly about methodological development.

Finnish Transportation Agency, Department of Nautical Charting

Trainee, June 2016 – Dec 2016

- Database quality checks and data handling
- Production of Electronic Nautical Charts
- Testing a possible replacement (CARIS HPD) for the current nautical charting system

Metropolia University of Applied Sciences

Lecturer on GIS, autumn semesters of 2015 and 2016

- Teaching a basic introductory course on GIS for the students of Environmental Engineering

Ministry of Natural Resources and Environment; Department of Water Resources, Lao PDR

Junior Expert Modeller, May 2015 – May 2016

- Hydrological and water quality modelling of Nam Xong and Nam Ngum watersheds in Northern Lao PDR
- Capacity building and training of the department staff in hydrological modelling
- Intensive work period of about 4 months, 2 months in Vientiane, Lao PDR. Occasional supporting tasks after the intensive period

Other Work Experience

Keskuspuiston Ammattiopisto / Invalidisäätiö, Helsinki

Night watch in a dormitory of a vocational college for the disabled, Nov 2005 – Nov 2014

- Providing assistance to the residents when needed and taking care of dormitory security
- Hotel manager/receptionist during school's summer holidays
- Fulltime night job and 3 months as a class room assistant

Various short term jobs, 1999 – 2005

Relevant Projects and Other Activities

Various projects dealing with the water environment

- SAIL 2013, 2015 and 2016 – A two-week intensive course on Sustainable Development on board STS Fryderyk Chopin. After the course, I was invited to the SAIL for Teachers 2015 and 2016 conferences as a watch leader taking the responsibility of a watch consisting of sustainability professionals of all ages. Sailed three trips in the North Sea, all together four weeks.
- 2013-2014 – Thesis project on the effects of mining and hydropower in Nam Ngum Watershed, Lao PDR.
- 2011-2012 – Various small projects during my exchange year in the Netherlands. They included determining ecological status of 3 distinct water bodies, water quality survey of the River Scheldt, small research on biological productivity and species richness of Rich Revetments and a week-long study on the status of River Guadalquivir in southern Spain.

CartoCV, 2016-

- A service or a set of instructions allowing anyone to create an interactive CV map
- An early demonstration of the map found in <http://markokallio.fi/>
- In semi-active development / documentation phase

Arctic Sounds, 2015-2016 (taken offline in early 2017)

- A web service visualizing music event data in Finland on a map
- Entered in the student category of Kartta2016-competition for high quality maps.

Volunteering

- General OSM mapping, volunteering for Humanitarian OpenStreetMap Team and Missing Maps Project by mapping and arranging mapathons.
- Participation in HOT Summit 2016 and State of the Map 2016 conference
- ALPO 2016 Seminar presentation on using R for GIS

Skills

Language

Finnish – Mother tongue

English – Excellent written and spoken

Swedish – Elementary

German – Elementary

Italian – Elementary

ICT

GIS – ArcGIS, QGIS, CARIS HPD, RiverLife GIS

Computing – MATLAB, R

Programming – Basics in Python, JavaScript, HTML and CSS, SQL

Certifications

CARIS HPD – Base Editor, Source Editor and Paper Chart Editor (3-week full time training)

Other noteworthy skills

Excellent professional and non-professional communication skills gained through challenging work with disabled people for over 9 years, friends from wide range of cultures and demanding work experience in Southeast Asia.