

# Robert Sirviö

Date of birth 10.6.1989

Curriculum Vitae

I am a graduate student at Helsinki university majoring in computer assisted mathematics. My fields of interest also include financial mathematics and computer science. I have been very successful in my studies, which in turn has had an influence in my versatile employment history.

#### Education

2014–2016 Master of Science, Helsinki University
 2010–2014 Bachelor of Science, Helsinki University
 2009–2010 Military service, Navy orchestra, Turku

#### Master's thesis

**Topic** Quantifying commodity basis risk by simulating the price dynamics of futures

Supervisor Samuli Siltanen, Gillis Danielsen

**Description** The objective of the thesis is to construct a risk measure on the commodity futures market. Central themes in the thesis are futures price modelling with stochastic differential equations, and model parameter estimation utilizing statistical filtering techniques.

E-thesis https://helda.helsinki.fi/handle/10138/162968

### **Employment**

#### 02/2016- Full stack developer, ANALYSE<sup>2</sup>

As a part of an agile development team, working on a modern and highly responsive single-page web-application. The product is an assortment planning-, and pricing software aimed at different retail markets. The backend is implemented as an ASP.NET Web API (REST), whereas the frontend is built with an MVVM implementation relying heavily on AngularJS and TypeScript.

#### 06/2015-09/2015 Portfolio management associate, ESTLANDER & PARTNERS OY

The research for my master thesis was done for Estlander & Partners. The main topic in my research was time series modelling of commodity futures utilizing Bayesian filtering algorithms. The objective is to produce a model that is able to quantify basis risk by simulating commodity spot price dynamics.

#### 11/2014-02/2016 Junior full stack developer, VALUATUM OY

I worked as a part of a developer team developing a credit risk and equity research web application (provided as SaaS). Both the backend (Java and MySQL) and frontend (JSP and JavaScript) rely heavily on different frameworks. I have also familiarized myself with different automated unit-, and integration testing techniques and technologies in my work at Valuatum.

#### 09/2014-11/2014 Course assistant, Helsinki University

As an course assistant I was responsible of conducting weekly exercise sessions for undergraduate students in different courses. I was also expected to develop model solutions to the exercise handouts and document the amount of exercises solved by the participants of the course.

#### 01/2010–12/2014 **Tutor**

I have been tutoring several high school students in their math courses (both in the long and short curriculum). The tutoring usually consisted of weekly sessions where I would assist a student according to his/her wishes and needs. I have received a lot of great feedback from my tutoring.

#### Programming skills

Languages Java, C#, JavaScript,

& TypeScript, HTML, CSS,

Scripting SQL, Bash, Fortran, MATLAB, Clojure, LATEX Technologies Spring, JUnit, Mockito,

& JRebel, .NET, Moq, Angu-

Frameworks larJS, jQuery, gulp, webpack, Robot Framework, JBoss,

Tomcat, AWS, git, SVN

OS Linux, Windows Database MySQL, PostgreSQL

Methods Object-oriented programming, Test-driven development, REST, MVVM,

& MVC, UML, Continuous integration, Jenkins, TeamCity, Agile methods,

Patterns Scrum, Kanban, Scrumban

Languages

Native Swedish

**Excellent** Finnish English

**Basics** Japanese German

## Links

Master's thesis
Bachelor's thesis (in Swedish)
Linkedin (fi.linkedin.com/in/rsirvio)