# Robert Sirviö

Date of birth 10.6.1989

Curriculum Vitae

I am a music enthusiast, techgeek and a Helsinki university graduate with
a master's degree in applied mathematics (computer assisted
mathematics). In spite of my graduation being quite recent, I have already
been able to establish a versatile and relevant working background.

## Education

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

## Master's thesis

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| **Topic** | Quantifying commodity basis risk by simulating the price dynamics of futures |
| **Supervisors** | 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$^2$

I am working, as a part of an agile development team, 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 Core REST API, whereas the frontend is built with an MVVM implementation resting on TypeScript, Angular and mobx.

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| 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 was 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

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| **Languages & Scripting** | Java, C#, JavaScript, TypeScript, HTML, CSS, SQL, Bash, MATLAB, LATEX | **Technologies & Frameworks** | Spring, JUnit, Mockito, .NET, Moq, AngularJS, mobx, gulp, webpack, ag-grid, Protractor, Cucumber, Robot Framework, AWS, git, SVN |
| **OS** | Linux, Windows | **Database** | MySQL,PostgreSQL, MSSQL |
| **Methods & Patterns** | Object-oriented programming, Reactive programming, TDD, REST, MVVM, IaC, Continuous integration (Jenkins, TeamCity, GitLab), Agile methods, Scrum | | |

## Languages

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| **Native** | Swedish |
| **Excellent** | Finnish English |
| **Basics** | Japanese German |

## Links

Master's thesis

Bachelor's thesis (in Swedish)

Linked**in**