

# Adam Bergmark

## *Curriculum Vitae*

### Contact information

E-mail address: adam@bergmark.nl

Phone number: +46 70-002 90 09

Skype username: adam\_bergmark

### Introduction

Born June 18th 1986 in Skellefteå, Sweden.

I'm a computer scientist who has been programming since around 1998, starting out with QBasic and web related languages such as JavaScript and PHP.

My main interest the last 5-10 years has been statically typed functional programming, mostly in Haskell but also in Scala, PureScript, OCaml, and TypeScript.

Some of my other interests within computer science are (microservice) application APIs, library design, programming language theory, compilers, computability, free software, category theory.

### Education

*Secondary school, 2005*

Holavedsgymnasiet

Tranås, Sweden

Orientation: Technnnology, Data/IT

*Masters program in Computer Science, 2013*

Linköping Institute of Technology

Linköping, Sweden

Orientation: Software engineering, Theoretical datalogy

### Work experience

References are available on request.

2005–2008 Web development freelancer

I created several websites from scratch using PHP and JavaScript.

2008–2009 Web developer, Java and front-end at Dimest AB

Stockholm, Sweden

- Head of client side development

2010-2011 Laboratory assistant at Linköping Institute of Technology Linköping, Sweden

- Web Programming (Introduction to HTML, CSS, JavaScript, and PHP)
- Object-Oriented Programming (Using Java, C++ , and Python)

2007–2012 Software development freelancer Linköping, Sweden

- Wrote a general purpose GUI based markdown editor in JavaScript
- Created a helicopter pilot schedule tracker for the swedish coast guard

2012–2016 Software Engineer at Silk (Haskell & TypeScript)  
Amsterdam, The Netherlands

- Authored the initial version of Silk’s embeddable visualizations
- Designed and implemented Silk’s server side CSV importer including its public API  
API spec: <https://github.com/silkapp/silk-api-client/wiki/Silk-Import-API>
- Wrote a bidirectional routing library based on the DOM History API
- Migrated our PostgreSQL interfacing Haskell code to the type safe SQL-generating DSL “Opaleye”  
by writing a general purpose framework  
Source code: <https://github.com/silkapp/girella>
- Wrote a Haskell test-suite/framework for black box testing our public API
- Major contributor to a client side multipart DSL à la Haxl (<https://github.com/facebook/Haxl>)
- Substantial work on our open source packages  
Repositories: <https://github.com/silkapp?type=source>
- Wrote a microservice responsible for semantic diffing of our XML document format
- Re-wrote our e-mail notification service to aggregate e-mail updates to users

2016-(ongoing) Software Engineer at Klarna (Scala)  
Stockholm, Sweden

- Designed API guidelines for the payments domain
- Lead designer for a unified Direct Debit REST API
- Holding monthly workshops teaching functional programming
- Wrote a Scala library for type-safe conversions
- Wrote a DSL for compile-time derivation of Swagger schemas for HTTP APIs
- Worked on unifying the build system of our microservices to SBT and simplifying dependency management
- Redesigned our continuous delivery pipelines in Jenkins

## Other merits

I'm currently active in Haskell community where I:

- Maintain “aeson”, the de-facto library for interfacing with JSON.  
<https://hackage.haskell.org/package/aeson>
- Co-authored the Haskell-to-JavaScript compiler “Fay”  
<https://github.com/faylang/fay/wiki>
- Co-authored the Hackage Matrix Builder  
A build bot for checking package compatibility across dependency and compiler versions  
<https://matrix.hackage.haskell.org/>
- Maintain a number of other packages  
<https://hackage.haskell.org/user/AdamBergmark>
- Curate the hackage package database as a hackage trustee  
[https://wiki.haskell.org/Hackage\\_trustees](https://wiki.haskell.org/Hackage_trustees)
- Curate the Stackage package collections  
<http://www.stackage.org/>

I've held presentations and workshops mostly focusing on functional programming. Here are the longer ones (at least 30 minutes)

- Haskell eXchange 2013 - Compiling Haskell to Javascript with Fay
- Ghent Functional Programming Group 2013 - Compiling Haskell to JavaScript
- Significant Bit 2013 - An introduction to functional programming with Haskell
- Functional Programming Amsterdam (FP AMS) 2014 - JavaScript as a Compilation Target
- FP AMS 2014 - Learn you a Haskell Workshops

Up until 2011 I authored a general purpose JavaScript framework “Cactus” which I used in various projects. It's about 10 000 lines of code. It leverages many design and architectural patterns such as Template View, Active Record, and Key Value Observing.

<https://github.com/bergmark/Cactus>

Profiles on related websites:

- GitHub: <https://github.com/bergmark/>
- Stack Overflow: <https://stackoverflow.com/users/182603/adam-bergmark>

## Natural Language Skills

### Proficient

English, Swedish (First language)

### Beginner

Dutch, German

## Technical skills

### Proficient

Programming languages: Haskell, Java, JavaScript, Ruby, TypeScript  
Frameworks/libraries: jQuery, Opaleye, React, Rest (Haskell), Ruby on Rails  
Databases: MySQL, PostgreSQL  
IDE:s and text editing: Emacs, Eclipse, IntelliJ IDEA  
Version control: git, Mercurial, Subversion

Operating systems: GNU/Linux, Mac OS X

**Familiar**

Programming languages: Assembler, C, Common Lisp, Emacs Lisp, OCaml, Python, Scala, Scheme

Operating systems: Windows

**Miscellaneous**

Citizenship: Swedish

Driver's Licence: Yes, Swedish

June 5, 2017