Adam Bergmark

Curriculum Vitae

Contact information

E-mail address: adam@bergmark.nl

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, dependent types, and data type generic programming.

Education

Masters program in Computer Science, 2013
Linköping Institute of Technology
Linköping, Sweden
Orientation: Software engineering, Theoretical datalogy

Secondary school, 2005
Holavedsgymnasiet
Tranås, Sweden
Orientation: Technnology, Data/IT

Work experience

References are available on request.

2017-(ongoing)   Software Engineer at Magine TV (Scala)
Stockholm, Sweden

2016-2017   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

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

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

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)

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

- Head of client side development

2005–2008   Web development freelancer
I created several websites from scratch using PHP and JavaScript.

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
- 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, Scala, TypeScript, Java, JavaScript, Ruby
Frameworks/libraries: Servant, React, Opaleye, Slick, Servant, Dropwizard
Databases/storage/messaging: PostgreSQL, S3, Kafka, MySQL
IDE:s and text editing: Emacs, IntelliJ IDEA
Version control: git, Mercurial, Subversion
Operating systems: Mac OS X, GNU/Linux
Build systems: Cabal/Stack, sbt
Continuous Integration: Jenkins, Travis CI
Deployment: AWS

Familiar

Programming languages: Assembler, C, Common Lisp, Emacs Lisp, OCaml, Python, Scheme
Operating systems: Windows

Miscellaneous

Citizenship: Swedish

Driver's Licence: Yes, Swedish

October 19, 2017