Schlossbergstrasse 3 6312 Steinhausen Switzerland

# **Tommy Jean Henrik Back**

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August 6, 1979, Finland

#### **EMPLOYMENT**

# Software Engineer

# **Monetas AG**

Apr 2014 - Jan 2015

- agile software development mentoring and putting lean processes in place aiming for top productivity.
- lead building of the software engineering infrastructure for automation and best practices.
- leading architectural improvements of existing system and future new systems.
- leading team of engineers in refactoring and transforming a large C++ legacy code base towards something decoupled and modular that can be scaled from a single machine to many machines running a single service.
- advocating engineering best practices and mentoring colleagues and open-source contributors.
- interviewing and building engineering team.

## **Software Engineer**

## **Source Capital AG**

Sep 2010 - Jun 2013

- in small elite team leading development of ultra low latency trading operations in C++ for Linux.
- built many FIX, FAST and proprietary price feeds and trading interfaces for ultra low latency and high quality.
- improved overall system performance several orders of magnitude for latency sensitive strategies looking at end to end including network, hardware, OS, software and so on addressing the largest latencies first.
- rewrote build system (make) for simpler and deterministic builds.
- mentored colleagues in software engineering and performance related topics.

#### Freelance IT Consultant

#### **Private**

2006 - 2013

 developed internal document system from scratch with Ruby on Rails and deployed on Heroku to help a client get a market advantage and automate workflows to save lots of time.

# **Software Engineer**

#### actant AG

Oct 2007 - Aug 2010

- developed distributed service framework (SOA) in C++ for future version of market making platform to move away from a monolithic architecture to something modern and flexible.
- several orders of magnitude performance improvements of overall market making platform.
- designed and developed fully automated Continuous Integration system integrating VCS, project management system and builds for fully automation and visibility.
- advocated Scrum and agile practices which lead to company-wide adoption. I continued to mentor product management and other colleagues in Scrum.

## **Software Engineer**

#### **Nokia Networks**

Jan 2006 - Jun 2007

- coordinated and lead overall porting effort of a messaging (MMS) solution from HP-UX to Linux that included about 20 engineers.
- demoed to management first successful MMS sent on the Linux platform.
- very much involved in a company-wide push to adopt agile software practices and establish lean processes.

#### Master Thesis

## **Nokia Networks**

May 2005 - Dec 2005

developed the external application interface (MM7) in C++ on HP-UX for the Nokia MMS Center.

## **Project Manager**

## **Nokia - TKK**

Oct 2004 - Apr 2005

- negotiated with people at Nokia to get a special project for a course at the university.
- successfully built and lead team to develop a web based inventory system for the LAMP stack.

#### Software Engineer, Intern

## **Nokia Networks**

May 2004 - Sep 2004

developed test automation using shell scripts for a client-server system saving weeks of manual work.

## **Freelance IT Consultant**

## Kemira Chemicals Oyj

Summer 2002 and 2003

- designed and developed a software system to help measurements in a lab.
- designed and developed a software system to measure luminosity of production line to aid adjustments.

# Software Engineer, Intern

Nokia

Jun 2002 - Aug 2002

• developed unit testing for embedded C using shell scripts and C.

## **Software Engineer, Intern**

Nokia

Jun 2001 - Aug 2001

developed testing platform in Java Servlets for the SyncML service.

# Espoo, Finland Helsinki University of Technology 2002-2006

• Computer Science, MSc. Tech.

Vaasa, Finland University of Vaasa 1999-2001

• Computer Science

Espoo, Finland Scrum Alliance 2008

Certified Scrum Master

#### **SKILLS**

- first principles thinking
- organization and planning, prioritization, problem solving, lean thinking and continuous improvements
- large-scale software design, architecture and development
- quality assurance, automation, optimization
- open-source development
- messaging systems, distributed systems, scaling, performance
- trading systems, FIX, FAST, various prop exchange protocols
- C/C++, Ruby, Golang, Shell scripting, ZeroMQ, Boost, ASIO, networking, Ruby on Rails, Linux, OSX, Git
- web technologies

#### **LANGUAGES**

- Swedish native
- English fluent
- Finnish professional
- German/Swiss-German moderate
- French basic