Björn Jensen-Urstad   Curriculum vitae

CONTACT INFORMATION	Björn Jensen-Urstad Skeppargatan 96 115 30 Stockholm Sweden	Mobile: +46-70-0222948 E-mail: bjorn.jensen.urstad@gmail.com Github: https://github.com/b3rnie/

QUALIFICATIONS AND INTERESTS

Distributed systems, Erlang/OTP, Scala/Java, embedded systems, low power embedded, software development, scaling, databases, protocols, functional programming, low level programming, fault tolerance, network protocols, eventual consistency, software architecture, message queues

AVAILABILITY

- Geographic location is flexible, but there is preference for Stockholm, Sweden

EDUCATION

Royal Institute of Technology, Stockholm, Sweden

B.S., Computer Science, 2006-2010, specializing in software development

MS.S., Computer Science, 2002-2004, four semesters out of 9

Hersby gymnasium, Lidingö, Sweden

Upper secondary school, 1997-2000

PROFESSIONAL EXPERIENCE

TrueAccord, Stockholm, Sweden/San Francisco, US
Remote work from Stockholm with periodic visits to San Francisco

Engineer   **September 2014-**
- Worked on the core infrastructure using Scala. Major contributions include: developing a scheduling service to contact debtors an the optimum time, a rule system to systematically deal with the compliance and regulations in debt collection, automatic dispute handling, components to throttle and rate-limit requests to external services.
- Numerous integrations and business features.

Self employed, Stockholm, Sweden

Consulting   **August 2013-**
- Designed, implemented and maintained a batch processing system using Zookeeper, Riak and Erlang/OTP. The system was built to scale and be able to handle terrabytes of data each day.

Kivra AB, Stockholm, Sweden

Engineer   **March 2013 to September 2013**
- Architecture, development and maintenance of the services that made up Kivra's system.

Klarna AB, Stockholm, Sweden

Engineer   **March 2010 to January 2013**
- Extended an existing transactional database (Mnesia) with features to allow parts of the data to be shared (read/written) in an eventual consistent manner. This involved writing a framework to allow easy transformation of keys/values between two very different databses with different availability requirements, adding vector clocks to an existing database schema and mechanisms to transport/sync data over RabbitMQ. The databases are the core of a business with a monthly revenue of 200 million USD
- Design and implementation of the alpha version of Klarna's checkout
- Experiments with automatic fraud detection

- Rewrote and replaced Klarna's old fraud checking system with a DSL accessible through a web GUI. This gave staff more freedom to express what they want and the possibility to change rules without involving developers
- Lots of minor features for the business such as integrating with new credit check agencies.

Posten AB, Stockholm, Sweden

Mailman **2001 to 2002 and 2004 to 2005**

MEMBERSHIPS

Housing Cooperative, Bjornligan **2007-2010**
- Board of directors and responsible for the economy

EFF (Electronic Frontier Foundation) **2010-**

SERVICE

Written several open-source projects (see github), including:
- Crontab implementation in Erlang
- Unique id generator in Erlang
- Various components for integrating with Apache ZooKeeper
- NNTP fetcher/assembler in Perl
- Socks 4/5 proxy in C++ (single thread using nonblocking IO)

SKILLS

Software development:
- Worked with Scrum, Kanban, Git, Subversion, test driven development, property based testing

Computer Programming:
- Excellent knowledge of Erlang/OTP and functional programming
- Good knowledge of Scala, Java, Ruby, C, C++, Perl
- Experience with JavaScript, Python, Haskell

Information/Internet Technology:
- Written my own TCP/IP stack running on a 8 bit microcontroller. From transport layer up to application layer (Ethernet, ARP, IP, ICMP, TCP, UDP). Implemented a simple webserver and bittorrent tracker on top of it
- Written servers and or clients for FTP, HTTP 1.0/1.1, SMTP, DNS, POP3, Jxta, NNTP, Irc, BitTorrent and Socks 4/5 as well as other less known protocols.
- Done web development in PHP, Ruby on Rails, AngularJS, Perl, CGI

Operating Systems/Software:
- GNU/Linux user since 1996, experience with OpenBSD and Solaris
- Experience with Apache, PostgreSQL, Bind, Riak, Rails, Spring, JPA, Hibernate, RabbitMQ, ZooKeeper, HAProxy

Hardware/Embedded systems:
- Experience with PCB design and creation in CadSoft Eagle (2-sided), digital electronics, low power embedded systems, Microchip PIC 8 bit family

EXTRA-CURRICULAR ACTIVITIES

My current passion is rock-climbing, in particular sport-climbing and trad- climbing. Diving has also been a big interest in my life for the last 7 years and I enjoy all parts of it, from advanced cave-diving and deep-diving to educating new divers.

OTHER

I speak/write Swedish fluently and have some German skills. I have a drivers licence.