Simon Holm Jensen

email: simon@hjensen.net
url: http://simon.hjensen.net
Born: July 6, 1984—Århus, Denmark

Citizenship: Danish
Languages: Danish(native), English(fluent), German(intermediate)

About

Versatile software engineer with a strong grounding in research. My background is in the intersection of programming languages and web technology and I have worked with these fields both in academia and industry. I experience both developing ideas and turning them into real systems for users. I am motivated by curiosity and enjoy building systems.

Current Position

Software Engineer at Snowflake Computing working on hard distributed system problems in connection with a distributed relation database system.

Languages and Tools

Languages - Expert: Java, JavaScript, OCaml, LaTeX
Languages - Familiar: Python, Scala, C++, SQL, Racket, Lambda Calculus
Tools: Classic UNIX, IntelliJ tools, Emacs, NodeJS, Grunt, Git, SVN, Chrome debugger and profiler, ed

Employment and Internships

September 2005 - August 2007: *Student programmer* at Mobilethink. Mobilthink is a software house in Århus producing over-the-air configuration services for mobile devices.

October 2007 - August 2008: *Student programmer* at the Computer Science department of Aarhus University. Developed research prototypes of static analysis tools for JavaScript.

Feburary 2010 - June 2010: *Intern* at IBM T.J Watson research center, New York. Worked in the Programming Tools group under Frank Tip on building automated testing tools for interactive web applications.

May 2011 - September 2011: *Intern* at IBM T.J Watson research center, New York. Worked in the Programming Tools group under Frank Tip continuing work from the first internship.

May 2012 - August 2012: *Intern* at IBM research Bangalore. Worked on tools for model based testing of enterprise applications. Results published at International Conference on Software Testing, Verification and Validation, ICST 2015.

July 2013 - September 2014: *Senior Engineer* at Samsung Research America. Worked in the area of programming languages and software engineering. Specifically I developed a tool for detailed analysis of the memory behavior of JS appications. The tool was used internally to diagnose memory problems in Tizen apps(Samsung's internally developed OS). Results were published and much of the code later open sourced.

September 2014 - Present: *Software Engineer* at Snowflake Computing. Snowflake is providing dataware housing as a service. Under the cover Snowflake is an ACID compliant relational database running on AWS, allowing users to scale storage and compute capacity orthogonally. I worked in fundamental distributed systems problems related to fault tolerance and reliable consensus.

References avaliable on request

Education

August 2004 – August 2007: B.Sc in Computer Science, Aarhus University

August 2007 – July 2010: M.Sc in Computer Science, Aarhus University

August 2008 – January 2013: Ph.D in Computer Science, Aarhus University. Thesis: *Static and Dynamic Analysis of Web Applications*. Advised by Anders Møller.

Publications

Peer reviewed conference articles

(1) Simon Holm Jensen, Anders Møller, and Peter Thiemann. Type analysis for JavaScript. In *Proc. 16th International Static Analysis Symposium, SAS '09*, volume 5673 of LNCS. Springer-Verlag, August 2009.

(2) Simon Holm Jensen, Anders Møller, and Peter Thiemann. Interprocedural analysis with lazy propagation. In *Proc. 17th International Static Analysis Symposium, SAS '10*, volume 6337 of LNCS, pages 238–256. Springer-Verlag, September 2010

(3) Shay Artzi, Julian Dolby, Simon Holm Jensen, Anders Møller, and Frank Tip. A framework for automated testing of JavaScript web applications. In *Proc. 17th International Conference on Software Engineering, ICSE 2011*.

(4) Simon Holm Jensen, Magnus Madsen, and Anders Møller. Modeling the HTML DOM and browser API in static analysis of JavaScript web applications. In *Proc. European Software Engineering Conference and ACM SIGSOFT International Symposium on Foundations of Software Engineering*, September 2011. **Distinguished Paper Award**

(5) Simon Holm Jensen, Peter A. Jonsson and Anders Møller. Remedying the Eval that Men Do. In *Proc. 21st International Symposium on Software Testing and Analysis, ISSTA 2012*

(6) Esben Andreasen, Asger Feldthaus, Simon Holm Jensen, Casper S. Jensen, Peter A. Jonsson, Magnus Madsen, and Anders Møller. Improving Tools for JavaScript Programmers. In *Proc. Script to Program Evolution, STOP 2012*.

(7) Simon Holm Jensen, Suresh Thummalapenta, Saurabh Sinha and Satish Chandra. Test Generation from Business Rules. In *8th IEEE International Conference on Software Testing, Verification and Validation, ICST 2015*. **Best Paper Award**

(8) Simon Holm Jensen, Manu Sridharan, Koushik Sen and Satish Chandra. MemInsight: Platform-Independent Memory Debugging for JavaScript. In *ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE 2015*.