

Petter Håggholm

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Software developer with full stack experience from Javascript through SQL but a penchant for the stuff in between. I believe that values should be immutable (where possible), white-space significant, types strong but inferred, dynamic, or duck-like; and that code which is easier to read is harder to write but worth the effort. I like to spend my time ensuring speed with profilers, correctness with QuickCheck, and quality by absence of smells. I like being right, even if I have to change my mind to get there. I believe that *scientia est potentia* and that *quidquid latine dictum sit altum videtur*.

	skill	professional	other	current	notes
SKILL OVERVIEW	C/C++		7 years		
	Django		3 years	✓	
	Java	2½ years	5 years	✓	
	JavaScript	7 years	5 years	✓	
	Linux	4 years	6 years	✓	Fedora, RHEL, Gentoo, Ubuntu...
	PHP	4 years			
	Python		8 years	✓	Favoured language
	SQL	7 years		✓	4yrs MySQL; 2½yrs SQL Server; some Postgres

WORK EXPERIENCE ◇ **Software Developer**, BAM Software and Services (May 2012 – present)

BAMSAS create and operate the BAM Interactive Platform, supporting a branded and several white label sites for horse and greyhound betting and fantasy sports, both online and on location via kiosks.

- Technical lead for FanEx.com and BetAmerica.com's fantasy sports games. Frontend (AngularJS) and backend (REST API: Java/{Spring,Jersey}/Hibernate) software design and implementation, and test automation; data feed processing and consolidation.
- Architect for new webclients (AngularJS, RequireJS, Node/Grunt).
- Primary technical resource for web frontend technologies.
- Primary driver of several technical quality initiatives, eg integration of static analysis using SonarQube.

◇ **Software Developer**, eRezLife Software (September 2007 – May 2012)

eRezLife Software is a small SaaS company producing management software for university residences, allowing clients to manage application processes, room selection and assignment, incident tracking, and hiring workflows for residence assistants. As of November 2011, the company has 7 employees, whereof 4 developers, and its clients include some 70 colleges and universities in Canada and the US.

- Lead developer of the room assignment, selection, and lottery modules.
- Designed and implemented an algorithm for a new room assignment module of the eRezLife university residence management system. Duties included requirement gathering, algorithm design, analysis, and optimisation, and software implementation in PHP/SQL, benchmarking, profiling, etc.

- Lead a number of metrics-driven performance improvements to resolve latency issues, database bottlenecks, &c.
 - Wrote deployment scripts; performed system setup, administration, and backup automation duties on RHEL5 and RHEL6 Linux servers.
 - ◇ **Research Assistant/Programmer**, Department of Computer Science, Bishop's University
(May 1, 2004 – August 31, 2004)
 - Assisted in the design of a soft realtime agent-based programming language, [RTSync](#).
 - Implemented the compiler and distributed runtime environment for the language with one other research assistant.
 - See also [Publication](#): *Distributed, real-time programming on commodity POSIX systems: A preliminary report*.
- EDUCATION
- ◇ **University of British Columbia**, Vancouver, British Columbia
Master's degree (M.Sc.) in Computer Science, August 2007.
Thesis: *PyRemote: Object mobility in the Python programming language*; see [Publication](#).
 - ◇ **Bishop's University**, Lennoxville, Québec
Bachelor's degree (B.Sc.) in Computer Science, June 2005.
Honours in Computer Science, minor in Mathematics.
- AWARDS
- ◇ University of British Columbia international student scholarship (2005, 2006)
 - ◇ The University Prize in Computer Science, Bishop's University (2005)
 - ◇ Stephen St. Clair Memorial Scholarship, awarded by Bishop's University (2002, 2003, 2004)
 - ◇ The Albert Kwong Memorial Prize in Computer Science, Bishop's University (2002)
 - ◇ The U-1 Alumni Prize, Bishop's University (2002)
 - ◇ Member of the Golden Key International Honour Society
 - ◇ *Georg Leires Fond* (the Georg Leire Fund), scholarship bequeathed by Bergska Skolan (2001)
- PUBLICATION
- ◇ *PyRemote: Object mobility in the Python programming language*.
Master's thesis (sole author), University of British Columbia, 2007.
 - ◇ *Distributed, real-time programming on commodity POSIX systems: A preliminary report*.
Stefan D. Bruda, Petter Håggholm, and Scott Stoddard
Proceedings of the 5th International Symposium on Parallel and Distributed Computing, Timisoara, Romania, July 2006, IEEE Computer Press, 2006.
- SKILLS
- ◇ Python, Java, JavaScript/ECMAScript, SQL, C, C++, PHP. Dashes of Haskell and bash.
 - ◇ Web frontend technologies (AngularJS, RequireJS) and toolchains (Grunt, Gulp, Node/npm)
 - ◇ Web backend technologies: Django, Spring
 - ◇ Some experience managing Linux VPSes (LAMP, nginx, PostgreSQL, uwsgi)
- TECHNICAL INTERESTS
- These are areas of interests and study: incipient, not extant skillsets.
- ◇ Functional programming; I'm studying Haskell *qua* language with few loopholes ("strict", albeit *not* in the technical sense), and with an existing web stack.
 - ◇ Fault tolerance and higher-level transactional or atomic operations (outside ACID systems). After gaining a modicum of competence in Haskell, I want to read up on BASE semantics.
 - ◇ Distributed systems (which I've studied only academically and never had professional opportunity to explore), especially to learn about performance, fault tolerance, and how on Earth people deal with the CAP theorem.
 - ◇ Security. Without false modesty, I disclaim any expertise, but to get started, I read books and I follow @OWASP.
- REFERENCES
- Available on request