

## SUMMARY

- **M.Sc, McGill University** with research in **Compilers and Program Analysis & Transformations** supervised by **Prof. Laurie Hendren** and assisted by the **X10 team at IBM Thomas J. Watson Research Center**.
- **3 years** of industry experience in software development as **Senior Systems Engineer** with **Infosys Technologies Ltd.**.
- Internship with **Sun Microsystems** as **Student Tech Lead, APAC region/Campus Ambassador**.
- Experience of working (part-time) with a funded **e-commerce startup**, developing social network interfaces.
- Extensive **programming experience (C and Java)**.
- Experience in all areas of static Compilers including **program analysis and transformations, compiling dynamic languages and programming language design**.

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Associated with some of the best people, schools and companies in Computer Science

## EDUCATION

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| <b>McGill University</b><br><i>M.Sc. in Computer Science (CGPA: 3.56/4.00)</i>  | August 2013 (expected)<br>Montreal, QC, Canada |
| <ul style="list-style-type: none"> <li>• Awarded the <b>summer DFW scholarship for top performing</b> International Graduate students.</li> <li>• Gave a grad seminar on X10 and compiling MATLAB to X10 .</li> </ul>   |  |
| <b>SASTRA University</b><br><i>B.Tech. in Computer Science &amp; Engineering (CGPA: 8.93/10.00)</i>   | June 2008<br>Thanjavur, India                  |
| <ul style="list-style-type: none"> <li>• For my B.Tech project, I developed DISCODE: A <b>decompiler</b> targeting C for OpenSolaris on x86.</li> <li>• Won the <b>dean's list scholarship for being in the top 10%</b> of the University.</li> <li>• <b>Co-founded and led GLOSS</b>(GNU Linux &amp; Open Source at SASTRA) club of the University.</li> <li>• <b>Executive member and member of editorial team</b> of Student Association of School of Computer Science.</li> </ul> |  |

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Graduate courses - Compiler Design, Program Analysis and Transformations, Advanced Techniques for Compiling Dynamic Languages, Distributed Systems, Computer Networks, Recommendation Systems for Software Engineering  
Active participation in extra-curricular activities

## EXPERIENCE

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| <b>McGill University</b><br><i>Research and Teaching</i>   | September 2011 - Present<br>Montreal, QC, Canada |
| <ul style="list-style-type: none"> <li>• Research Assistant, <b>SABLE Lab</b> - My research interests include <b>program analysis &amp; transformation techniques</b> to compile dynamic programming languages to static object-oriented and HPC languages. My research is <b>supervised by Professor Laurie Hendren</b>. As a part of my thesis I am developing <b>MIX10 : a MATLAB to X10 (A new HPC language by IBM research) compiler</b>. I get direct assistance from the <b>X10 team at IBM Thomas J. Watson Research Center</b>.</li> <li>• Teaching Assistant - COMP 621 Program Analysis and Transformations (Winter 2013).</li> <li>• Teaching Assistant - COMP 520 Compiler Design (Fall 2012).</li> </ul> |  |
| <b>Infosys Technologies Ltd.</b><br><i>Senior Systems Engineer</i>   | September 2008 - August 2011<br>Pune, India      |
| <ul style="list-style-type: none"> <li>• <b>Led</b> the offshore <b>deployment performance management</b> team for AT&amp;T online and mobility.</li> <li>• <b>Worked on 8 projects</b> and they all exceeded performance targets under peak loads.</li> <li>• Contributed to the <b>SEO recommendation system</b> used by the <b>Infosys global marketing team</b>.</li> </ul>  |  |
| <b>MySmartPrice</b><br><i>Developer (part-time)</i>  | October 2010 - July 2011<br>Pune, India          |
| <ul style="list-style-type: none"> <li>• MySmartPrice is an Indian <b>e-commerce startup</b> that provides a price comparison engine for online stores. I worked with the founders over weekends and brainstormed design and implementation strategies</li> <li>• I Wrote the initial <b>social network interfaces</b> for facebook and twitter.</li> </ul>  |  |
| <b>Sun Microsystems</b><br><i>Intern - Student Tech Lead, APAC region/Campus Ambassador</i>  | January 2007 - May 2008<br>Bangalore, India      |
| <ul style="list-style-type: none"> <li>• I was promoted from Campus Ambassador to one of <b>only 5 Tech Leads worldwide</b>.</li> <li>• Conducted webinars and developed tutorials for Campus Ambassadors worldwide.</li> <li>• As a Campus Ambassador I was one of <b>only 27 Campus Ambassadors across India</b>.</li> <li>• <b>Taught</b> a certificate course on <b>OpenSolaris</b>.</li> <li>• Conducted several seminars on OpenSolaris and other Sun technologies in SASTRA and nearby Colleges.</li> </ul>   |  |

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Reserach, Teaching, Compilers, Program analysis, Program transformation and optimization techniques, Program language design, Code generation, Java, MATLAB, JastAdd, Flex, Bison, Beaver, MATLAB , X10

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Software development, Software engineering, Management, SEO, C, HP LoadRunner

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e-commerce, startup, social network APIs, PHP, Apache, MySQL

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Teaching, Evangelism, Open Source culture, OpenSolaris

## PUBLICATIONS

- Vineet Kumar and Laurie Hendren. First steps to compiling MATLAB to X10. In Proceedings of the 2013 ACM SIGPLAN X10 Workshop, **X10 '13 co-located with PLDI 2013**.

PROJECTS (COURSE AND OTHER)

- isComplex value analysis for MATLAB programs: Analysis to identify if a value is complex or real. (*url*)
- FreeMeLegal: An Open source license recommendation engine. (*url*)
- WIG (a subset of <bigwig> language) to PHP compiler (in team of two).
- DotGyan: A server side browser independent search enhancement tool for web pages with textual content. (*url*)

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*Data flow analysis, Open Source licenses, Compilers, Twitter API, OAuth, RSS, PHP, C, Javascript*