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## SUMMARY

- Career interest in **teaching** and **research**.
- **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**.
- **Teaching assistantship** for **two graduate level** courses - Compiler design and Program analysis & transformations.
- **3 years** of industry experience in software development as **Senior Systems Engineer** with **Infosys Technologies Ltd.**
- **Teaching and technology evangelism** as **Student Tech Lead, APAC region/Campus Ambassador** (intern) with **Sun Microsystems**.
- **Co-founder** and **Student chairman** of GNU Linux and Open Source club of SASTRA University at undergraduate level.
- 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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## EDUCATION

### McGill University

*M.Sc. in Computer Science (CGPA: 3.56/4.00)*

August 2013 (expected)  
Montreal, QC, Canada

- Awarded the **summer DFW scholarship for top performing** International Graduate students.
- Gave a grad seminar on X10 and compiling MATLAB to X10 .

### SASTRA University

*B.Tech. in Computer Science & Engineering (CGPA: 8.93/10.00)*

June 2008  
Thanjavur, India

- For my B.Tech project, I developed DISCODE: A **decompiler** targeting C for OpenSolaris on x86.
- Won the **dean's list scholarship for being in the top 10%** of the University.
- **Co-founded and led** GLOSS(GNU Linux & Open Source at SASTRA) club of the University.
- **Executive member and member of editorial team** of Student Association of School of Computer Science.

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## 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**.

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## EXPERIENCE

### McGill University

*Research and Teaching*

September 2011 - Present  
Montreal, QC, Canada

- Research Assistant, **SABLE Lab** - My research interests include **program analysis & transformation techniques** to compile dynamic programming languages to static object-oriented and HPC languages. My research is **supervised by Professor Laurie Hendren**. As a part of my thesis I am developing MiX10 : a **MATLAB to X10 (A new HPC language by IBM research) compiler**. I get direct assistance from the **X10 team at IBM Thomas J. Watson Research Center**.
- Teaching Assistant - COMP 621 Program Analysis and Transformations (Winter 2013).
- Teaching Assistant - COMP 520 Compiler Design (Fall 2012).

### Infosys Technologies Ltd.

*Senior Systems Engineer*

September 2008 - August 2011  
Pune, India

- **Led** the offshore **deployment performance management** team for AT&T online and mobility.
- **Worked on 8 projects** and they all exceeded performance targets under peak loads.
- Contributed to the **SEO recommendation system** used by the **Infosys global marketing team**.

### MySmartPrice

*Developer (part-time)*

October 2010 - July 2011  
Pune, India

- MySmartPrice is an Indian **e-commerce startup** that provides a price comparison engine for online stores. I worked with the founders over weekends and brainstormed design and implementation strategies.
- I Wrote the initial **social network interfaces** for facebook and twitter.

### Sun Microsystems

*Intern - Student Tech Lead, APAC region/Campus Ambassador*

January 2007 - May 2008  
Bangalore, India

- I was promoted from Campus Ambassador to one of **only 5 Tech Leads worldwide**.
- Conducted webinars and developed tutorials for Campus Ambassadors worldwide.
- As a Campus Ambassador I was one of **only 27 Campus Ambassadors across India**.
- **Taught** a certificate course on **OpenSolaris**.
- Conducted several seminars on OpenSolaris and other Sun technologies in SASTRA and nearby Colleges.

## SKILLS AND COMPETENCIES

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### Relevant Courses

- Compiler Design, Program Analysis & Transformations, Advanced Techniques for Compiling Dynamic Languages, Distributed Systems, Computer Networks, Recommendation Systems for Software Engineering.

### Programming languages and Software tools

- Java, C, PHP, Perl(basic), Javascript(basic), MATLAB , X10 , HTML, XML, RSS, twitter API, facebook API, Apache, MySQL, JastAdd, Flex, Bison, Beaver, Eclipse, Vim, L<sup>A</sup>T<sub>E</sub>X.

### Areas of interest (with experience)

- Teaching, Research, Software development, Programming language design, Compilers and program analysis, Web startups, Social networking apps, e-commerce.

## PROJECTS (COURSE AND OTHER)

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- 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*)