VINEET KUMAR

514-970-9179, vineet.kumar@mail.mcgill.ca
3498 Rue Hutchison, Apt#501, Montreal, QC, Canada - H2X 2G4

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**.

EDUCATION

McGill University   August 2013 (expected)
M.Sc. in Computer Science (CGPA: 3.56/4.00)   *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   June 2008
B.Tech. in Computer Science & Engineering (CGPA: 8.93/10.00)   *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.

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**.

EXPERIENCE

McGill University   September 2011 - Present
Research and Teaching   *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.   September 2008 - August 2011
Senior Systems Engineer   *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   October 2010 - July 2011
Developer (part-time)   *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   January 2007 - May 2008
Intern - Student Tech Lead, APAC region/Campus Ambassador   *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

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, LaTeX.

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)

· 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*)