
SUMMARY

- Seeking a **full-time** software development position **starting May 2014** (or later).
- **M.Sc Computer Science**, McGill University | **3+ years of industry experience** in all aspects of software development.
- Extensive programming experience in **Java** and **C**.
- Programming languages - *Proficient*: Java, C, X10, MATLAB | *Prior experience*: PHP, Python.

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

April 2014

Montreal, QC, Canada

- Master's thesis reviewed as **"Excellent"** by the external reviewer.
- Won the summer differential fee waiver for being among the top-performing international students in the University.

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

June 2008

Thanjavur, India

- Won the Dean's list scholarship for being among the **top 10%** students in the University.
- **Co-founded and led** GLOSS(GNU Linux & Open Source at SASTRA) club of the University.
- **Executive member** and **member of the editorial team** of the Student Association of School of Computer Science.

PUBLICATIONS AND TALKS

- *Publication*: 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**.(bit.ly/18owBUI)
- *Talk*: Vineet Kumar and Laurie Hendren. MiX10 : Compiling MATLAB for high performance computing via X10. **12th Compiler-Driven Performance Workshop** at **CASCON 2013**.(bit.ly/1hXms8N)

WORK EXPERIENCE**McGill University***Research and Teaching*

January 2012 - April 2014

Montreal, QC, Canada

- **Research Assistant, Sable Lab** - My research included program analysis and static compilation of dynamic languages.
 - Designed and developed (**in Java**) MiX10 : a MATLAB to X10 compiler for high-performance, under **Prof. Laurie Hendren's** supervision and with direct inputs from the X10 **design team at the IBM T.J. Watson research center**.(bit.ly/1sZ8aqJ)
 - Achieved **7 times (mean) faster** performance compared to the standard MATLAB implementation.
 - Discovered **2 bugs** and a **severe performance bottleneck** in the X10 compiler.
- **Teaching Assistant** - Program Analysis and Transformations, Compiler Design, and Introduction to Computer Systems.

Infosys Technologies Ltd.*Senior Systems Engineer*

September 2008 - August 2011

Pune, India

- **Led** a team of 4 for **deployment performance management** for AT&T's online and mobility frontend and backend applications.
 - My team's job was to design and develop (**in C**) performance test scripts, analyze results, and troubleshoot performance issues.
 - Worked on 8 projects and they all exceeded performance SLA under peak loads.
- Part of the development team for 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.
 - Contributed in the design and development of their core crawler algorithm.

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

January 2007 - May 2008

Bangalore, India

- Promoted from being one of the **only 27 Campus Ambassador across India** to one of the **only 5 Tech Leads worldwide**.
 - Conducted webinars and developed tutorials for Campus Ambassadors worldwide.
 - **Taught** a certificate course on **OpenSolaris**.

OTHER PROJECTS (top 3)

- FreeMeLegal: An Open source license recommendation engine (COMP 762 Recommender systems, individual).(bit.ly/1m030GV)
 - Recommendations based on similarities with the top projects on Sourceforge.net.
 - Implemented a crawler (in PHP) to collect data for top projects on Sourceforge.net.
- Performance Analysis and comparison of ZeroMQ and TCP (COMP 535 Computer networks, team of three).(bit.ly/1m0dcPE)
 - Compared throughput and latency of a ZeroMQ based P2P chat system to that of a TCP based P2P chat system.
 - Both the chat systems were implemented by us in Java.
- Analysis to identify complex numerical values for MATLAB programs (COMP 621 Program analysis, individual).(bit.ly/15SYKmC)
 - Developed a language to express information propagation through library function calls.(bit.ly/1ezq93q)
 - Accurate results for all the 20 benchmarks used by the McLab project.