

SAMEER JAGDALE

EDUCATION

- McGill University, Montreal, QC
MSc Computer Science, **G.P.A. 3.86/4.0**
September 2012 - Present
- University of Pune, Pune, India
Bachelor of Engineering, **G.P.A. 3.7/4.0**
August 2008 - June 2012

EXPERIENCE

McGill University

Montreal, QC

Teaching Assistant (Operating systems, Program analysis and transformations)

January 2013 - Present

- Explained key concepts and guided students to appreciate challenges in developing operating systems kernels optimized for enhanced performance in different computing environments.
- Helped students simulate fundamental components of operating systems such as file system, inter-process communication, multi-threading et al.

Tata Consultancy Services

Pune, India

Project Trainee

June 2011 - April 2012

System to determine plasma temperature using real-time image processing

- Developed as part of my senior year project course. The project involved development of a prototype that calculated the temperature, in real time, of plasma during a nuclear fusion reaction from images captured from a high resolution camera.
- Developed in C++ and utilized the OpenCV library for the image processing module and the OpenCL framework for GPU interfacing. GTK2 was used to develop the GUI.

TECHNICAL SKILLS

- Proficient in Java, C, C++ and Matlab.
- Basic knowledge of shell programming, HTML, Javascript and Python.
- Courses: Computer Networks, Distributed Systems, Compiler optimisation, Intro to Crowdsourcing.

MASTER'S THESIS

Sable Research Lab, McGill University

Montreal, QC

Research Assistant

May 2013- Present

VeloCty

- Extension to the Velociraptor compiler toolkit developed at the Sable Lab. It aims to compile functions written in high-level array based languages such as Matlab and Python to C++ with OpenMP pragmas.
- Functions are packaged as shared libraries that can be called from the source language, allowing users to continue writing code in their preferred high-level language while compiling specific hot methods to parallel code.

PROJECTS

Distributed Itinerary Management System

- Designed the system to distribute its core workload across separate servers for flight, car and hotel booking and implemented middleware for client interaction
- Used Javas Remote method invocation API to establish communication between different servers.
- Implemented transaction management and two-phase commit to ensure conformance to ACID properties.

AutoGrader

- Developed to ease grading assignments in the Operating Systems course.
- Python script which parses source files looking for keywords. Also executes programs to verify correctness