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### **EDUCATION**

• M.S. Computer Science, Florida State University, Tallahassee GPA: 3.7, Expected graduation: December 2014

• B.E., Electrical and Electronics Engineering, Sri Sairam Engineering College, (Anna University), 2009

### SKILLS

Languages: C, C++, Java, Python

Frameworks and libraries: OpenMP, OpenCL, OpenGL, MPI, CUDA, SSE, X10

Databases: MySQL

Operating Systems: Linux 2.6.9, 3.0.30

## EXPERIENCE

 $Graduate\ Technical\ Intern,$  Intel, (Oct2012- Jan2013)

Many Integrated Cores (MIC), System Software Management

- Develop and sustain components of the Intel MIC software stack on Linux and Windows
- Creating C wrappers for new API's for call stack on old API's

Developer, Kuali Rice Project (Summer Intern) (May 2010 - Aug 2010)

- provide an enterprise class middleware suite of integrated products that allow for applications to be built in an agile fashion
- Worked as a developer for Rice 2.0, involved in writing classes and unit testing

Project Associate, Indian Institute of Technology, Madras (Aug 2011 - Dec 2011)

'Object oriented wrappers for Linux kernel'

- Minimalistic Object Oriented Linux where C++ wrappers are created for specific device drivers
- Provided non-trivial designated initializers support for g++ 4.4.5

# RELEVANT PROJECTS

- Graph partitioning in GPU(CUDA, OpenCL, C++)
  Implemented the Lanczos algorithm for spectral partitioning in CUDA and OpenCL
- Student Management System(Java, J2EE, XML, Flex)

Created a student management system with Java, J2EE, XML parsing and Adobe Flex

- 2D Ising Model in MPI and OpenCL(MPI, CUDA, C++)
  - Monte Carlo approach using Metropolis algorithm was implemented in MPI and OpenCL and performance analysis was carried out
- Linux Kernel Development(Linux 2.6.9)

Designed a fair share scheduling algorithm, simple system call and ext-2 like file system

- K-Means on SSD(C, NAND FLASH, SSD)
  - Implemented K-Means clustering algorithm on SSD device to improve data access pattern and time
- Implementation of TCP functionalities over UDP
  - Functionalities include connection establishment and shutdown, buffer management, RTT and RTO computation, checksum computation, timer implementation and sliding window protocol
- Advanced Unix Programming(C++, OpenMP, Pthreads)
  - Designed and created an Unix 'make' like utility, a global file organizer, TIC TAC TOE server for multiplayer support
- Robust Movement Detection using PSI Mote(Python, J2EE)
  - Detection algorithm was implemented using Python and mobile application for display was implemented in J2EE
- Parallel Data Mining
  - Developed parallel implementation of K-Nearest Neighbors, K-Means, PageRank and Naïve Bayes Algorithms

## OPEN SOURCE CONTRIBUTIONS

- Worked on providing non-trivial designated initalizers (C99 standard) support for compile time g++ 4.4.5
- Working as a Debain maintainer