Aditya Pakki

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Education

- **University of Utah** **Salt Lake City, UT**
  School of Computing, M.S. Computer Science *2014 – Aug 2016*
  - Project: An Efficient Method for Component Failure Resiliency in Uintah. Advisor: Prof. Martin Berzins.
- **Jawaharlal Nehru Tech. University** **Hyderabad, India**
  Bachelor of Technology, Information Technology *2007 – 2011*
  - Project: Implementing secure message transmission across MANETs. Advisor: Prof. P. Gopalakrishna.

Technical Skills

Languages: C++, Python, C, Java, LaTeX, shell programming, MPI, OpenMP, CUDA.
Tools & Environments: Linux, SVN, Git, Vim, Eclipse, MATLAB, Autotools, Cmake, GDB, GCC, ROOT.
Past Experience: Go, JavaScript, COBOL, XML, JCL.

Experience

- **Los Alamos National Laboratory** **Los Alamos, NM**
  Graduate Research Assistant *May 2017 – Aug 2017*
  - Supervised by Dr. Jozsef Bakosi & Dr. Christoph Junghans, in the Data Science at Scale summer school.
  - Conducting data analysis on fluid dynamics using ROOT framework and exploring possible visualization capabilities.
- **Goldman Sachs, Inc.** **Salt Lake City, UT**
  Contractor Technology Specialist *Dec 2016 - May 2017*
  - Ensure that the organization production & QA computing infrastructure is running and healthy.
  - Wrote scripts in shell and SQL queries for various databases flavors to resolve job failures and load issues.
- **Scientific Computing and Imaging Institute** **Salt Lake City, UT**
  Graduate Research Assistant *May 2015 - Aug 2016*
  - Added resiliency capabilities to Uintah Computation Framework using C++11 with Boost libraries & STL.
  - Implemented task re-execution capability for core failures and data bounded cubic interpolation routines for node failures. Presented partial results at RESPA'15 workshop at SC'15.
- **University of Utah** **Salt Lake City, UT**
  Graduate Teaching Assistant *Aug 2014 - May 2015*
  - TA for undergrad courses - Introduction to Scientific Computing & Object Oriented Programming.
  - Helped students with MATLAB, Python and Java programming as well as in using NumPy, SciPy numerical libraries in Linux environment.
- **Automatic Data Processing, Inc.** **Hyderabad, India**
  Software Developer *Aug 2011 - Jun 2014*
  - Performed query optimization, migrated queries from DATACOM to DB/2, tuned indices, and used Kanban for production issues.

Academic Projects

- **Mining system logs to predict failures:** Implemented Apriori and clustering algorithms, using Python on supercomputer logs to compare the efficiency of detecting failures.
- **CUDA based P3DFFT algorithm:** Worked on migrating the C based library API to CUDA and measured performance improvements by running on cluster of NVIDIA Tegra TK1 GPUs.