Aditya Pakki

Minneapolis • USA • adityapakki@gmail.com
+1 (385) 216 5791 • https://adityapakki.github.io

Education

- **Ph.D. Computer Science**   **University of Minnesota - Twin Cities**   **Minneapolis, MN**
  Advisor: Prof. Kangjie Lu   *GPA: 4.0 / 4.0*   *Aug 2017 – present*
  - Reserach Interests: Computer Systems, System security, Machine Learning.

- **M.S. Computer Science**   **University of Utah**   **Salt Lake City, UT**
  Advisor: Prof. Martin Berzins   *GPA: 3.63 / 4.0*   *Aug 2014 – Aug 2016*

- **B.Tech. Information Technology**   **Jawaharlal Nehru Techn. University**   **Hyderabad, India**
  Advisor: Prof. P. Gopalakrishna   *Score: 82.37 / 100*   *Sep 2007 – Jun 2011*

Technical Skills

Languages: C++11, Python, C, LaTeX, shell scripting, MPI, OpenMP, CUDA.
Tools & Environments: Linux, SVN, Git, Vim, MATLAB, Cmake, GDB, GCC tool chain, ROOT.
Past Experience: Go, Java, JavaScript.

Experience

- **University of Minnesota**   **Minneapolis, MN**
  Graduate TA for Discrete Strucutres   *Aug 2017 - present*

- **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.
  - Performed data analysis by answering various questions in fluid dynamics along with visualization.

- **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++11with 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**
  TA for Introduction to Scientific Computing & Object Oriented Programming   *Aug 2014 - May 2015*

- **Automatic Data Processing, LLC**   **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.