

SANMUKH RAO KUPPANNAGARI

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2667 Ellendale Place, 107 ◊ Los Angeles, California 90007

EDUCATION

University of Southern California

Summer 2018 expected

PhD in Computer Engineering

Ming Hsieh Department of Electrical Engineering

Current GPA: 3.80/4.00

Indian Institute of Technology, Guwahati

May 2011

Bachelor of Technology, Computer Science and Engineering

Overall CPI: 8.20/10.00

EXPERIENCE

Ming Hsieh Department of Electrical Engineering

August, 2013 - Present

Research Assistant

Los Angeles, CA

- Data driven modeling for identification and protection of critical state variables in power grids
- Optimal Customer Selection for Demand Response in SmartGrids
- Lead developer of the DR software which is used to implement Demand Response event in USC Smart-Grid for the joint demonstration project between LADWP and USC. *Technologies:* Java/MongoDB/R
- High level performance model based design space exploration for energy efficient FPGA designs.

Ming Hsieh Department of Electrical Engineering

August, 2014 - Present

Teaching Assistant

Los Angeles, CA

- Course: Computer Systems Organization, Parallel and Distributed Computing.
- Responsibilities include lecturing, proctoring examinations, creating programming labs, holding office hours for addressing students' queries and supervision of examination grading.

Mathworks

May 2015 - August 2015

Compiler Engineer Intern

Natick, MA

- Improved the resource sharing algorithm for sharing multipliers in HDLCoder
- *Technologies:* C++

Adobe India

June 2011 - July 2013

Member Technical Staff

Noida, India

- Adobe Acrobat Licensing Module: Responsible for development and maintenance of the licensing workflows of Adobe Acrobat. *Technologies:* C++/Objective-C
- Adobe Acrobat Macintosh Deployment: Responsible for development and maintenance of Mac/OSX installers for Adobe Acrobat and Adobe Reader. *Technologies:* Objective-C/Python/Bash/pkgbuild
- Adobe Acrobat Synchronizer: Responsible for maintenance of the synchronizer module which is used in commenting and collaboration workflow using PDF document via Adobe Acrobat. *Technologies:* C++/Objective-C

TECHNICAL STRENGTHS

Computer Languages	C, C++, Python, Bash, Objective-C, Verilog, Java
Tools	Apache Spark, IBM Cplex, git, svn

RELEVANT COURSEWORK

Coursework	Grade
CSCI 675: Convex and Combinatorial Optimization	currently enrolled
CSCI 570: Analysis of Algorithms	A
EE 441: Applied Linear Algebra for Engineering	A

PUBLICATIONS

- Sanmukh R. Kuppannagari, Rajgopal Kannan, Charalampos Chelmiss and Viktor K. Prasanna, *Implementation of Learning-Based Dynamic Demand Response on a Campus Micro-grid*, 25th International Joint Conference on Artificial Intelligence, IJCAI-16 Demo Track.
- Sanmukh R. Kuppannagari, Rajgopal Kannan, Charalampos Chelmiss, Arash S. Tehrani, and Viktor K. Prasanna, *Optimal Customer Targeting for Sustainable Demand Response in Smart Grids*, International Conference on Computational Science, 2016.
- Charith Wickramaarachchi, Sanmukh R Kuppannagari, Rajgopal Kannan, and Viktor K Prasanna, *Improved protection scheme for data attack on strategic buses in the smart grid*, IEEE Conference on Technologies for Sustainability, 2016.
- Sanmukh R. Kuppannagari, Rajgopal Kannan and Viktor K. Prasanna, *An ILP based Algorithm for Optimal Customer Selection for Demand Response in SmartGrids*, 2015 International Symposium on Big Data and Data Science (CSCI-ISBD), December 2015.
- Sanmukh R. Kuppannagari and Viktor K. Prasanna, *Efficient Generation of Energy and Performance Pareto front for FPGA Designs (Abstract Only)*, 2015 the ACM/SIGDA International Symposium on Field Programmable Gate Arrays (FPGA '15), February 2015
- Sanmukh R. Kuppannagari, Yusong Hu and Viktor K. Prasanna, *High Level Performance Model Based Design Space Exploration for Energy-Efficient Designs on FPGAs*, The 5th International Green Computing Conference (IGCC14), November 2014.
- Sanmukh R. Kuppannagari, Shreyas G. Singapura, Ren Chen, Andrea Sanny, Geoffrey Phi C. Tran, Shijie Zhou, Yusong Hu, Stephen P. Crago, Viktor K. Prasanna, *Energy Performance of FPGAs on PERFECT Suite Kernels*, IEEE 18th International Conference on High Performance Extreme Computing (HPEC '14), September 2014
- Rakesh Yarlagadda, Sanmukh R. Kuppannagari and Hemangee K. Kapoor, *Performance Improvement by N-Chance Clustered Caching in NoC based Chip Multi-Processors*, The 2011 World Congress in Computer Science, Computer Engineering and Applied Computing'11
- Om P. Patri and Sanmukh R. Kuppannagari, *AutoAmp: An Open-Source Analog Amplifier Design Tool - For Classroom and Lab Purposes*, Indian Conference for Academic Research by Undergraduate Students (ICARUS), 2010