SANJAY KRISHNA GOUDA

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EDUCATION

Master of Science in Computer Engineering Expected Graduation: June 2018
University of California, Santa Cruz

Bachelor of Engineering in Electronics and Communication Engineering September 2012 - June 2016
Chaitanya Bharathi Institute of Technology, Hyderabad.

TECHNICAL SKILLS AND INTERESTS

Skills C,C++, Python.
Interests Communication protocols, Network Security Protocols, Privacy Preserving Data Mining.

PROJECTS

Guiding Sensor Nodes over 2.5D Terrain April-June 2017

· Simulated a distributed metaheuristic search algorithm to optimize sensor node deployment in 2.5D terrains.
· Showed 50% improvement in run time of an existing algorithm using custom simulator.

A Brief History of Homomorphic Encryption Schemes May 2017

· Compared and analyzed the runtime and efficiency of various implementations of different classes of Homomorphic Encryption schemes.

Branch predictor January-March 2017

· Created a branch predictor using various concepts from two different type of state of the art branch predictors.
· The hybrid predictor showed better prediction accuracy on 20% of the evaluation traces.

Design and Layout of 32 bit SRAM Using Cadence Virtuoso January-March 2017

· Designed an SRAM core along with all the peripheral circuitry for read and write operations.
· Configured the design to optimize noise margin. Performed DRC and LVS checks.

IMPLEMENTATION OF SPANNING TREE PROTOCOL September - December 2016

· Implemented the Spanning Tree Protocol in the ns3 simulator as a layer 3 routing protocol.
· Successfully shown proof of concept in that there are no forwarding loops and cycles in different test topologies when used to route paths.
· The network graph converges into a spanning tree through a distributed algorithm implemented on each node.

EXPERIENCE

Grader January 2017 - Current

Assessed performance of over 200 students per class in subjects including Introduction to Internet, Computer Architecture and Computational Models evaluating weekly assignments and mid terms.

INTERNSHIP/TRAININGS

Embedded Systems Training at National Small Industries Corp. Hyderabad. May 2015 - August 2015
Embedded System workshop by Texas Instruments September 2014