USC Viterbi School of Engineering

Computer Engineering: Ph.D. Dissertation Topics

2016 Dissertation Titles

- Thermal Modeling and Control in Mobile and Server Systems
- The Effects of Device Scaling on Angular Ionizing Single-event Effects
- Scalable, Timely and Accurate Network Management Systems for Datacenters
- High Throughput Network Traffic Measurement and Analysis
- Performance Improvement and Power-Efficient Design of On-chip Networks

2015 Dissertation Titles

- Power Efficient GPGPUs Design
- A Function Based Methodology for Evaluating Resilience in Smart Grids
- Power Efficient and Reliable Throughput Processor Design
- Energy Management of Electric and Hybrid Electric Vehicles and Their Application to the Smart Grid
- Reliable Cache Memories
- Scheduling and Resource Allocation with Incomplete Information in Wireless Networks

2014 Dissertation Titles

- A Function-based Methodology for Evaluating Resilience in Smart Grids
- Design of Low-power and Resource-efficient On-chip Networks
- Mitigating Intermittent and Permanent Faults in CPUs and GPGPUs
- Microprocessors Defect-tolerance Framework for General Purpose Computing System