

# DANDA SAI KOTI REDDY

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## CONTACT ADDRESS

Stochastic Systems Laboratory,  
Department of Computer Science and Automation,  
Indian Institute of Science, Bangalore-560012, India.  
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## RESEARCH INTERESTS

**Theory:** Reinforcement Learning, Stochastic Control and Optimization  
**Applications:** Smart grids, Quadcopter control

## EDUCATION

**M.Sc.(Engg).** [Aug 2014 - May 2017]  
Department of Computer Science and Automation (CSA),  
Indian Institute of Science (IISc), Bangalore, India.  
**C.G.P.A:** 6.0/8  
**Research Supervisor:** Prof. Shalabh Bhatnagar.  
**Thesis title:** Stochastic Newton methods with enhanced Hessian estimation.

**B.Tech.** [2008 - 2012]  
Information Technology,  
NRI Institute of Technology, Guntur, A.P,  
Affiliated to Jawaharlal Nehru Technological University, Kakinada, A.P, India.  
**Percentage:** 75%

**Class XII** [2006 - 2008]  
Vikas Junior College, Guntur, A.P,  
Affiliated to Board of Intermediate Education, A.P, India.  
**Percentage:** 88%

**Class X** [2005 - 2006]  
Bhashyam Public School, Guntur, A.P,  
Affiliated to Board of Secondary Education, Andhra Pradesh, India.  
**Percentage:** 90%

## PROFESSIONAL EXPERIENCE

- **Summer Intern** in IBM India Research Lab (IRL), Bangalore, May-Nov, 2016.  
**Project Title:** Use-cases on Blockchain.
- **Project assistant** in Robert Bosch Center for Cyber Physical Systems, Bangalore  
Dec 2016 - Jun 2017.  
**Project Title:** Distributed Multi-Agent Algorithms for Dynamic Control of Microgrids.

## PROGRAMMING SKILLS

C, C++, Java, MATLAB, Go

## CONFERENCE PUBLICATIONS

- **D. Sai Koti Reddy**, Prashanth L.A., and Shalabh Bhatnagar,  
*Improved Hessian estimation for adaptive random directions stochastic approximation*,  
55th IEEE Conference on Decision and Control (CDC), Las Vegas, NV, USA, 2016, pp. 3682-3687.
- **D. Sai Koti Reddy**, S.S Raghava, P. Viswanath and T. Hitendra sarma,  
*An Improvement to k-Nearest Neighbor Classifier*,  
Accepted in ICDM-2010, 3rd International Conference on Data Management,  
IMT, Ghaziabad, India, 2010, Pages 314-324.

## SUBMITTED CONFERENCE PAPERS

- Chandramouli K., **D. Sai Koti Reddy**, and Shalabh Bhatnagar,  
*Deterministic Perturbations For Simultaneous Perturbation Methods Using Circulant Matrices*,  
56th IEEE Conference on Decision and Control (CDC) (Submitted).
- Raghuram Bharadwaj D., **D. Sai Koti Reddy**, and Shalabh Bhatnagar,  
*Multi-agent Q-Learning for minimizing Demand-Supply deficit in microgrids*,  
IEEE International Conference on Smart Grid Communications (Submitted).

## PROFESSIONAL SERVICE

**Conference reviewer:** IEEE CDC 2017.

## ACADEMIC HONORS

- GATE AIR 583 in Computer Science and Information Technology (2014).
- Secured **Second rank** in Information Technology Department, NRIIT (2008-2012).

## TEACHING ASSISTANTSHIP

- Algorithms and Programming (Aug-Dec 2016)

## ROLES AND RESPONSIBILITIES

- **Lab administrator** for Stochastic Systems Laboratory, CSA, IISc.
- **Head of student Co-ordinators** for inter college tech fest WishV 2011, NRIIT.
- Student representative for the Department of Information Technology, NRIIT 2008-12 .

## COURSE WORK

Completed (during Masters program in IISc, Bangalore)

Stochastic Models and Applications  
Design and Analysis of Algorithms  
Linear Algebra and Applications  
Computational Methods in Optimization  
Reinforcement Learning

## ACADEMIC PROJECTS

- Algorithms for coordinate control of tightly coupled drones for carrying payloads (Feb 2017 - ).
- Distributed Multi-Agent Algorithms for Dynamic Control of Microgrids (Dec 2016 - ).
- Actor-Critic Algorithms with Function Approximation for Constrained Markov Decision Processes (Aug 2016 - ).
- Hessian estimation procedures for adaptive random directions stochastic approximation in Simulation Stochastic Optimization (May 2015 - Dec 2016).
- A study on Gradient based Temporal Difference Learning Algorithms : A Review (Jan-Apr 2015).
- Network Packet Route Tracer : A .Net based web application (2010 - 2012).
- Screen Shot Hacker : A .Net based Client Server application (2010 - 2012).

## REFERENCES

**Prof. Shalabh Bhatnagar,**  
Department of Computer Science and Automation,  
Indian Institute of Science Bangalore, India.  
E-mail: shalabh@csa.iisc.ernet.in

**Dr. Viswanath Pulabaigari,**  
Department of Computer Science and Engineering,  
Indian Institute of Information Technology, Chittoor, India.  
E-mail: viswanth.p@iiits.in  
viswanth.pulabaigari@gmail.com