# DANDA SAI KOTI REDDY

### CONTACT ADDRESS

Stochastic Systems Laboratory,

Department of Computer Science and Automation, Indian Institute of Science, Bangalore-560012, India.

E-Mail: danda.reddy@csa.iisc.ernet.in

Web: saikotireddy.github.io Mobile Number: +91-9632145457

### 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

Reseach 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.
- $\bullet$  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