

# Sandeep Kumar

PHD STUDENT

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## Education

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### Indian Institute of Technology Delhi

DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

Delhi, India

- Advised by Prof. S. R. Sarangi

Jul. 2017 - Exp. Aug. 2021

### Indian Institute of Science

MASTER OF ENGINEERING IN COMPUTER SCIENCE

Bangalore, India

- Advised by Prof. K. Gopinath

Jul. 2011 - Aug. 2013

### Guru Gobind Singh Indraprastha University,

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE

New Delhi, India

- Advised by Prof. K. Gopinath

Jul. 2007 - Aug. 2011

## Research Interest

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Security, Distributed and Parallel Systems, Operating Systems, Mobile Systems, IOT, Machine Learning.

## Publications

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1. **Sandeep Kumar**, Diksha Moolchandani, Takatsugu Ono and Smruti Sarangi. *F-LaaS: A Control-Flow-Attack Immune License-as-a-Service Model* . In **IEEE SCC**, Milan, Italy, 2019.
2. **Sandeep Kumar**, Poorna Talkad Sukumar, K. Gopinath, Dr. Jayanth Sampath, Laura Rocchi, Suyameendra Kulkarni. *Towards a Portable Human Gait Analysis & Monitoring System* . In **IEEE ICSigSys**, Bali, Indonesia, 2018.
3. **Sandeep Kumar**, Sindhu Padakandla, Chandrashekhar L, Priyank Parihar, Gopinath K, Shalabh Bhatnagar. *Scalable Performance Tuning of Hadoop MapReduce: A Noisy Gradient Approach* . In **IEEE Cloud**, Hawaii, USA, 2017.

## Experience

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### Indian Institute of Science

RESEARCH ASSOCIATE

Bangalore, Karnataka

Sept 2014- July 2017

- Worked on auto tuning of Hadoop Map-reduce using Stochastic algorithms and Human gait analysis. Details in the publication section.

### Dell R&D

SOFTWARE DEVELOPMENT ENGINEER

Bangalore, India

Jul 2013-Jun 2014

- Responsible for BIOS configuration and system management tools, DCC (Dell Command Configure) and OMCI (Open Manage Client Instrumentation) respectively
- GUI changes to DCC.

## Research Projects

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### Toy C Compiler

COURSE PROJECT FOR COMPILER DESIGN

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- Implemented a Toy C Compiler using Flex Bison and LLVM as part of the Compiler Course Work. It contains LLVM IR code generation and implementation of some basic optimizations.

## References

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- **Smruti R Sarangi**, Associate Professor, Department of Computer Science, Indian Institute of Technology, Delhi, India. [srsarangi@cse.iitd.ac.in](mailto:srsarangi@cse.iitd.ac.in)
- **K.Gopinath**, Professor Computer Science and Automation, Indian Institute of Science. [gopi@csa.iisc.ernet.in](mailto:gopi@csa.iisc.ernet.in)