Amit Sangroya INRIA Rhône-Alpes Grenoble, France Phone: +33 7 60 68 35 93 Email: amit.sangroya@inria.fr http://sardes.inrialpes.fr/~sangroya

# Work Experience

| • | Graduate Researcher  ERODS (formerly SARDES) team, INRIA Rhône-Alpes, Grenoble, France                                         | Jan 2011 - till date |
|---|--------------------------------------------------------------------------------------------------------------------------------|----------------------|
| • | Research Intern  IT University of Copenhagen (ITU), Denmark  — SOA security Modelling and literature review of cloud computing | Apr 2010 - Aug 2010  |
| • | Project Trainee (SOA Governance group) CORDYS Software India Pvt. Limited, Hyderabad                                           | Feb 2009 - July 2009 |
| • | Graduate Research Assistant Software Engineering Research Lab (SERL), IIIT Hyderabad                                           | Jan 2008 - Aug 2010  |
| • | Junior Research Engineer (Handwriting Recognition project) Center for Visual Information Technology (CVIT), IIIT Hyderabad     | Sep 2006 - Dec 2007  |
| • | Lecturer  HCTM Kaithal, Kurukshetra University                                                                                 | Aug 2004 - Aug 2006  |

#### Education

### PhD in Computer Science

INRIA Rhône-Alpes, Grenoble, France

Jan 2011 - Ongoing

- Thesis Title: Towards Dependability and Performance Benchmarking for Cloud Computing Services

### Master of Science (By Research) in Computer Science

International Institute of Information Technology, Hyderabad, India

Jan 2008 - Aug 2010

- Thesis Title: Towards Evaluating Service Oriented Architectures (CGPA: 7/10)

### Bachelor of Technology in Information Technology

Kurukshetra University, Haryana, India (Percentage: 68%)

July 2000 - July 2004

### Research Interests

Cloud Computing, Service-Oriented Architectures, Software Architecture, Software Engineering

#### PhD Dissertation Overview

- Proposed efficient approaches to evaluate dependability and performance for cloud computing services.
- Designed and developed MRBS (a dependability benchmark software prototype for Hadoop MapReduce).

# MS Dissertation Overview

- Introduced an approach to evaluate the impact of governance policies on prominent quality attributes in service oriented architectures.
- Explored various data security risks and proposed an analysis approach in Cloud Computing environments.

# **Major Publications**

"SLA and Quality-of-Service for Cloud Computing", la Conférence d'informatique en Parallèlisme, Architecture et Système (ComPAS-2013), Grenoble, France, January 2013.

- "Benchmarking Dependability of MapReduce Systems", IEEE International Symposium on Reliable Distributed Systems (SRDS 2012), Irvine, California, October 2012.
- "MRBS: Towards Dependability Benchmarking for Hadoop MapReduce", Workshop on Big Data Management in Clouds (BDMC) in conjunction with Euro-Par 2012, Rhodes Island, Greece, August, 2012.
- "Dependability Benchmarking of MapReduce", Poster at European Conference of Systems (EuroSys 2012), Bern, Switzerland, April 2012.
- "Modelling Security for Service Oriented Applications", 8th Nordic Workshop on Model Driven Software Engineering (NW-MODE 2010), co-located with the 4th European Conference on Software Architecture (ECSA), Copenhagen, Denmark, 23-26 August 2010.
- "SAGE: An Approach to Evaluate the Impact of SOA Governance Policies", 5th IEEE International Workshop on Service Oriented Architectures in Converging Networked Environments (SOCNE 2010), in conjunction with IEEE 24rd International Conference on Advanced Information Networking and Applications (AINA), Perth, Australia, April 20-23, 2010.
- "Towards Analyzing Data Security Risks in Cloud Computing Environments", International Conference on Information Systems, Technology, and Management (ICISTM 2010), Bangkok, Thailand, March 11-13, 2010.
- "Multilingual Web Usability Testing A MUST Methodology", Second International Conference on Creativity and Innovation in Software Engineering (CISE-2009), Ravda (Nessebar), Bulgaria, 10 12 June 2009.

# Research Projects

January 2011 - Ongoing MyCloud

Consortium: INRIA, EMN LIP6, WeAreCloud

Objective: Providing SLA management in cloud computing infrastructures.

May - July 2010 Migrating of MeDICi Project in a Cloud Environment

Supervised By: Dr. Muhammad Ali Babar, ITU Copenhagen

Objective: Migration of Middleware for Data-Intensive Computing (MeDICi) to a cloud computing environment using open source environments such as Eucalyptus and Hadoop.

MS Course project 2008 Naive Bayes Classification in Hadoop Environment

Objective: Implementation of Naive Bayes classification algorithm in a cloud computing paradigm (Hadoop MapReduce) to improve the time complexity.

MS Course project 2007 Online Clustering of Linguistic Data

Objective: Implementation of single-pass text clustering algorithm designed specifically for news stories.

Sep 2006 - Dec 2007 Online Handwriting Recognition Engine

Supervised By: Dr. Anoop Namboodiri, CVIT, IIIT Hyderabad

Objective: Design and develop a robust and accurate handwriting recognition system for Indian scripts.

### Advance CourseWork

During PhD: Data Science (In french), Technology Management, ValoriDoc

**During MS:** Topics in Software Architecture, Software Platforms, Cloud Computing, System's View of Business, Advance Problem Solving, Pattern Recognition, Digital Image Processing

# Skills

Software Development: Java, C/C++, MySQL, UML, Matlab, Perl, HTML, Shell scripting

Cloud Computing: MapReduce, Hadoop, Amazon EC2, OpenNebula, Grid5000

Toolkits/Libraries: Eclipse, NetBeans, SVN, Latex, Hive, Mahout, Cloudburst

### Miscellaneous

- State level scholarships throughout for excellence in academics
- Awards in Cricket, Yoga and Basketball
- Top Conferences (Attended): ComPAS-2013, SRDS-2012, EuroSys-2012, CSEET-2009, ICGSE-2008, ISEC-2008, IJCAI-2007

#### Referees

Dr. Sara Bouchenak Email: sara.bouchenak@imag.fr Assistant Professor, University of Grenoble, France +33 04 76 51 44 11 Dr. Vasudeva Varma Email: vv@iiit.ac.in Professor and Dean (Research & Development), IIIT Hyderabad +91 98 491 16254 Dr. Muhammad Ali Babar Email: maba@itu.dk Associate Professor, IT University of Copenhagen, Denmark +45 7218 5107 Prof. Kesav V. Nori Email: kesav.nori@gmail.com Distinguished Professor of Computer Science, IIIT Hyderabad +91 92 461 01060 Dr. Santanu Paul Email: santanu.x@gmail.com Entrepreneur and Adjunct Faculty, IIIT Hyderabad +91 98 660 76013

#### Other Information

Nationality: Indian Languages: English (Fluent), Hindi (Native), French (Intermediate)

Date of Birth: 5th October 1983 Availability: January 2014