# Satish Kumar

PhD Research Scholar

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# Education

2016 – Present **Doctor of Philosophy\*** – Pursuing from School of Computer Science, University of Birmingham, Birmingham, UK. (Expected thesis submission- May 31, 2020)

PhD Thesis Title: *Technical Debt-Aware Dynamic Service Composition in SaaS Cloud.* Supervisors: Dr Rami Bahsoon and Prof. Rajkumar Buyya (External supervisor, The University of Melbourne, Australia)

- 2009 2011 Master of Technology (Software Engineering) School of Information & Communication Technology, Gautam Buddha University, Greater Noida, India
- 2010 2011 **Postgraduate Certificate in Information Technology** Department of Computing, Sheffield Hallam University, Sheffield, U.K.
- 2006 2009 Master of Computer Application Department of Computer Science & Engineering, M.M.M, Engineering College, Gorakhpur, Uttar Pradesh Technical University Lucknow (now AKTU Lucknow) India.
- 2003 2006 **Bachelor of Computer Application** Department of Computer Science , Bhartiya Institute of Management Technology, Chaudhary Charan Singh University, Meerut, India.

Certifications

- 2009 **SUN SCJP** Sun Certified Programmer for the JAVA platform (Score 98%)
- 2010 DB2 9 Fundamentals IBM Certified Database Associate

## Publications

 ${\sf IEEE/ACM\ SEAMS},\ \textbf{S.\ Kumar}\ {\sf,T.Chen,\ R.\ Bahsoon,\ and\ R.\ Buyya.\ DATESSO:\ Self-Adapting\ Service\ Composition of the property of the property$ 

2020 tion with Debt-Aware Two Level QoS Constraints Reasoning, *IEEE/ACM 15th International Symposium on Software Engineering for Adaptive and Self-Managing Systems*, Seoul, South Korea, 2020. [Accepted]

IEEE ICWS, 2019 **S. Kumar**, R. Bahsoon, T.Chen and R. Buyya. Identifying and Estimating Technical Debt for Service Composition in SaaS Cloud, *25th IEEE International Conference on Web Services*, Milan, Italy, 2019.

IEEE ICPADS, 2018 **S. Kumar**, R. Bahsoon, T.Chen and R. Buyya. Multi-Tenant Cloud Service Composition using Evolutionary Optimization, *24th IEEE International Conference on Parallel and Distributed Systems, Singapore*, 2018.

CONFLUENCE, 2018 A. Vashishtha, **S.Kumar**, P. Verma, R. Porwal. A Self-Adaptive View on Resource Management in Cloud Data Center. 8<sup>th</sup> International Conference on Cloud Computing, Data Science & Engineering, IEEE Press, Noida, Inida, 2018

### **Under Review**

IEEE TSE, 2020 **S. Kumar**, T.Chen, R. Bahsoon, and R. Buyya. DebtCom: Technical Debt-Aware Service Recomposition in SaaS Cloud, *IEEE Transactions on Software Engineering*, 2020. [Under review]

# Teaching Experience

2016 - Present **Teaching Assistant** - School of Computer Science, University of Birmingham, U.K.

Currently, I involve in several academic activities at undergraduate and postgraduate level.

- Delivering small class room teaching (up to 40 students)
- Delivering software engineering seminar
- Supervising student's group project
- Students assignment marking and Help desk

2014 - 2016 Lecturer - Department of Information Technology, IMS Ghaziabad, Dr A.P.J. Abdul Kalam Technical University, Lucknow, India.

I was involved in several academic activities at postgraduate level.

- Delivering class room teaching.
- Supervising students project
- o Coordinator: Industrial student's project and IT Seminar
- 2011 2013 Full time guest faculty (Teaching Associate) School of Information and Communication Technology, Gautam Buddha University, Greater Noida, India

I was involved in several academic activities at undergraduate and postgraduate level.

- Delivering class room teaching
- Supervising students project

## Module Tutoring

2016-2020 I am working in following modules at the University of Birmingham, U.K.

Autumn Software Engineering — I

Autumn Software Workshop (Java Programming)

Spring Software Engineering — II

Spring Software Workshop (Java Programming) — extended

## Selected Talks

- 2019 Invited talk at seminar of Software Engineering Research Group, School of Computer Science, University of Birmingham, UK.
- 2018 Invited talk at seminar of Software Engineering Research Group, School of Computer Science, University of Birmingham, UK.
- 2017 Invited talk at seminar of Software Engineering Research Group, School of Computer Science, University of Birmingham, UK.
- 2016 Shyam Lal College, University of Delhi, India

# Technical Proficiency

Programming Languages Java and Python

Modelling Languages UML, BPML and BPEL

Web Technologies Web Service, Microservices, Java Script, and HTML

framework and Tools Spring Boot, jBPM, JUnit, Maven, Apache Tomcat, Hibernate, Docker

Word Processing LATEX and MS Office

#### References

Dr Rami Bahsoon- Senior Lecturer and founding member of Birmingham Software Engineering Research Group, School of Computer Science, University of Birmingham, UK.

Dr Tao Chen- Lecturer, Department of Computer Science, Loughborough University, UK.