

# Sheshadri K R

☎\* 9845213149 | 🌐 [github.com/Sheshadri-1992](https://github.com/Sheshadri-1992) | 📍\* Bangalore, India

## EXPERIENCE

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### IISc Bangalore

*Ph.D Scholar*

Aug. 2018 – Present

Bangalore, India

- Designed and implemented Quality of Service aware Serverless platforms for different application domains
- Proposed and developed reliable distributed data stores for Fog-Edge layer

### Ericsson India Global Services Pvt. Limited

*Research Intern*

Jun 2023 - Sep 2023

Bangalore, India

- Proposed and implemented proof-of-concept data-store near 5G Telco Edges

### Samsung R and D

*Senior Software Engineer*

Jun 2017 - Aug 2018

Bangalore, India

- Designed device plugin APIs and test cases for SmartThings Android application.

### IIIT Hyderabad

*Teaching Assistant - Scripting and computing environments*

Aug. 2016 – Nov. 2016

Hyderabad, India

- Designed assignments for Python scripting, shell scripting(bash), grep, sed etc.

### Robert Bosch Engineering and Business Solutions

*Associate Software Engineer*

Sep. 2013 – Sep. 2014

Bangalore, India

- Developed an iPhone application called DeltaApp using Objective C for issuing reminders to water plants.
- Developed an Internet web browser using C++ in Qt framework for embedded systems.

## PUBLICATIONS

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### Hybrid Serverless Platform for Service Function Chains

*S. K. R and J. Lakshmi, 16th IEEE CLOUD 2023*

Jul 2023

### QoS aware FaaS for Heterogeneous Edge-Cloud continuum

*S. K. R and J. Lakshmi, 15th IEEE CLOUD 2022*

Jun 2022

### QoS aware FaaS platform

*S. K. R and J. Lakshmi, (STEERS Workshop) IEEE/ACM 21st International CCGrid, 2021*

Jun 2021

### Elfstore : A Resilient Data Storage Service for Federated Edge and Fog Resources

*S. K. Monga, S. K. Ramachandra and Y. Simmhan, ICWS, 2019*

Aug. 2019

### Dynamic Scaling of Video Analytics for Wide-area Tracking in Urban Spaces

*Aakash Khochare, KR Sheshadri, R Shriram, Yogesh Simmhan, 2019 19th IEEE/ACM CCGrid, 2019*

Jul. 2019

## SELECTED PROJECTS

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### Hybrid distributed data store - Erasure coding and Replication

*Course Project: DS256 - IISc Taught by Prof. Yogesh Simmhan*

- Designed and developed a data-store which supports replication and Erasure Coding based on a storage budget.

### Implementation of HBase with recovery

*Master's project - IIIT-H : Advised by Dr. Vivekanand Vellanki*

- Designed and developed a HBase like system which runs on HDFS, supports the standard *put()* and *get()*.
- Implemented two different variations of recovery through Write Ahead Logs (WALs). Used Apache Zookeeper to perform leader election among region servers.

## AWARDS

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### IEEE TCSC SCALE Challenge

May 2019

*Issuer : CCGrid, for "Dynamic Scaling of Video Analytics for Wide-area Tracking in Urban Spaces"* CCGrid, 2019

- Handled the vehicular simulation using SUMO, where the traffic was overlayed on the IISc Campus.

### Best Paper Award

May 2021

*Issuer : Serverless To sErvE moRe at Scale STEERS 2021, with CCGrid*

CCGrid, 2021

### Dean's Award for Academic Excellence, academic year 2016-2017

Nov. 2017

*Issuer: IIIT Hyderabad*

Hyderabad, India

### Merit prize for featuring in top-10 in the CSE Dept 5th and 6th Semester, BIT

Sep. 2011 – Jan. 2012

*Issuer : CSE Dept, BIT Bangalore*

Bangalore, India

## EDUCATION

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### IISc, Bangalore

Aug. 2018 – Present

*Ph.D, Serverless computing, Function as a Service (FaaS), IoT  
Advised by : Dr. J. Lakshmi, CSL, SERC*

Bangalore, India

### IIIT Hyderabad

Aug. 2015 – Jun. 2017

*M.Tech CSIS*

Hyderabad, India

### Bangalore Institute of Technology

Aug. 2009 – Jun. 2013

*B.E. Computer Science and Engineering*

Bangalore, India