

# Suvam Basak

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Prime Minister's Research Fellow at *Indian Institute of Technology Kanpur*

**Web:** [suvambasak.github.io](https://suvambasak.github.io)

**Email:** [suvambasak22@iitk.ac.in](mailto:suvambasak22@iitk.ac.in), [suvambasak@cse.iitk.ac.in](mailto:suvambasak@cse.iitk.ac.in)

**Github:** [github.com/suvambasak](https://github.com/suvambasak)

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## Research Interests

**Implementation and simulation** of *Networked Systems* and the *Internet of Things*.

## Education

Ph.D.	<b>Indian Institute of Technology Kanpur (IIT-K)</b> Department of Computer Science & Engineering <i>Advisor: Dr. Amitangshu Pal &amp; Dr. Debopam Bhattacharjee</i> – CGPA: 8.75/10	Kanpur, Uttar Pradesh 2022 – Present
M.Tech.	<b>University of Hyderabad (UoH)</b> School of Computer and Information Sciences collaboration with IDRBT <i>Thesis title: An Integrated and Standards-based Fog Computing Federation Framework</i> <i>Advisor: Prof. Satish Narayana Srirama</i> – CGPA: 9.61/10	Hyderabad, Telangana 2020 – 2022
B.Tech.	<b>West Bengal University of Technology (WBUT)</b> Computer Science & Engineering, JIS College of Engineering <i>CGPA: 8.6/10</i>	Kolkata, West Bengal 2014 – 2018

## Research Experience

### Cloud and Smart Labs

Advisor: [Prof. Satish N. Srirama](#) (UoH) 2021 – 2022  
An Integrated and Standards-based Fog Computing Federation Framework: Dynamic deployment of services on the fog nodes out of the box on the fly with OASIS TOSCA standard. [GitHub](#).

## Teaching Experience

CSJM University (UIET)

### Course Instructor

- CSE-S208 - Data Structure Using Python 2023-24-II

IIT Kanpur

### Teaching Assistant, Department of CSE

- [CS724](#) - Sensing, Communications and Networking for Smart Wireless Devices 2023-24-I

- [CS610](#) - Programming for Performance 2022-23-I

### Teaching Assistant, eMasters in Financial Technology & Management

- [MBA977](#) - IT Platforms, Cloud Computing, and IoT 2023-24

### Teaching Assistant, eMasters in Cyber Security

- [CS971](#) - Computer Networking II 2022-23

- [CS963](#) - Computer Networking I 2022-23

### Tutor, Department of CSE

- ESC111M/112M - Fundamentals of Computing - I & II 2022-23-II

## Conference Publications

2024 ACM IMC

CosmicDance: Measuring Low Earth Orbital Shifts due to Solar Radiations  
Suvam Basak, Amitangshu Pal, Debopam Bhattacharjee

2022 IEEE Cloud

Fog Computing out of the Box with FogDEFT Framework: A Case Study  
Satish Narayana Srirama, Suvam Basak

## Journal Publications

2023 ACM IJNM

Fog computing out of the box: Dynamic deployment of fog service containers with TOSCA

Suvam Basak, Satish Narayana Srirama

### Workshop Publications

2023 ACM MobiCom  
LEO-NET

Exploring Low-Earth Orbit Network Design  
**Suvam Basak**, Amitangshu Pal, Debopam Bhattacharjee

### Honors and Scholarships

Prime Minister's Research Fellowship (PMRF) – Cycle 11	2023 – 2026
AICTE scholarship in M.Tech. (Ministry of Education – India)	2020 – 2022
GATE qualified with 95%tile	2019 and 2020
Smart India Hackathon finalist (KL University, Guntur, Andhra Pradesh)	2017

### Technical Skills

*Programming:*

Proficient in: C, Python – Familiar with: Flask, Verilog, Dart, Flutter, Solidity, JavaScript, Java

*Tools & Softwares:*

Gurobi Optimizer, Ansible, Docker, Docker Swarm, TOSCA, OpenStack, QEMU/KVM

*Hardware:*

Raspberry Pi, Arduino

### Referees

IIT Kanpur

**Dr. Amitangshu Pal**, *Assistant Professor*  
Department of Computer Science & Engineering  
**E-mail:** [amitangshu@cse.iitk.ac.in](mailto:amitangshu@cse.iitk.ac.in), **Web:** [cse.iitk.ac.in/users/amitangshu](http://cse.iitk.ac.in/users/amitangshu)

Microsoft Research

**Dr. Debopam Bhattacharjee**, *Senior Researcher*  
**E-mail:** [debopamb@microsoft.com](mailto:debopamb@microsoft.com), **Web:** [bdebopam.github.io](http://bdebopam.github.io)

University of Hyderabad

**Prof. Satish Narayana Srirama**, *Professor (Member IEEE)*  
School of Computer and Information Sciences  
**E-mail:** [satish.srirama@uohyd.ac.in](mailto:satish.srirama@uohyd.ac.in), **Web:** [scis.uohyd.ac.in/srirama](http://scis.uohyd.ac.in/srirama)