

Suvam Basak

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

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Research Interests

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

Education

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

Research Experience

Cloud and Smart Labs Advisor: Prof. Satish N. Srirama (UoH) 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 .	2021 – 2022
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Teaching Experience

CSJM University (UIET) <i>IIT Kanpur</i>	Course Instructor - CSE-S208 - Data Structure Using Python Teaching Assistant, Department of CSE - CS724 - Sensing, Communications and Networking for Smart Wireless Devices - CS610 - Programming for Performance Teaching Assistant, eMasters in Financial Technology & Management - MBA977 - IT Platforms, Cloud Computing, and IoT Teaching Assistant, eMasters in Cyber Security - CS971 - Computer Networking II - CS963 - Computer Networking I Tutor, Department of CSE - ESC111M/112M - Fundamentals of Computing - I & II	2023-24-II 2023-24-I 2022-23-I 2023-24 2022-23 2022-23 2022-23-II
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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
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Workshop Publications

2023 ACM MobiCom	Exploring Low-Earth Orbit Network Design
LEO-NET	Suvam Basak , Amitangshu Pal, Debopam Bhattacharjee

Talks

2024 ACM IMC	CosmicDance: Measuring Low Earth Orbital Shifts due to Solar Radiations
2024 IIT Kanpur	Beaming Internet connectivity directly from Space - State of the Art (SOTA) Seminar
2023 LEO-NET Workshop	Exploring Low Earth Orbit Network Design

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 , <i>Assistant Professor</i> Department of Computer Science & Engineering E-mail: amitangshu@cse.iitk.ac.in , Web: cse.iitk.ac.in/users/amitangshu
Microsoft Research	Dr. Debopam Bhattacharjee , <i>Senior Researcher</i> E-mail: debopamb@microsoft.com , Web: bdebopam.github.io
University of Hyderabad	Prof. Satish Narayana Srirama , <i>Professor (Member IEEE)</i> School of Computer and Information Sciences E-mail: satish.srirama@uohyd.ac.in , Web: scis.uohyd.ac.in/~srirama