Sangeeta Kakati

sangeeta.kakati@iiitg.ac.in | https://www.linkedin.com/in/sangeeta-kakati-1b828b162/ | https://sangeeta1998.github.io/

EDUCATION

University of Luxembourg

Luxembourg

Doctoral Researcher

Present position

Indian Institute of Information Technology

Guwahati, India

Master of Technology in Computer Science

May 2022

• CGPA: 8.78

Central Institute of Technology

Kokrajhar, India

Bachelor of Technology in Information Technology

2016-2020

• CGPA: 9.12

Kendriya Vidyalaya

Barpeta, Assam

AISSCE (Class 12)

2014-2016

• Percentage: 84.6

Kendriya Vidyalaya

Barpeta, Assam

AISSE (Class 10)

• CGPA: 10

• Merit Certificate

2014

EXPERIENCE

Research Intern May-July 2021

Indian Institute of Information Technology(IIIT)

Guwahati, India

• Secure Multiparty Authentication without trusted third party

• Tool Used: AVISPA

Research Intern June-July 2019

Indian Institute of Technology(IIT)

Assam, India

• Research on Security in Internet of Things by dividing it into three security aspects Authentication, Authorization and Access Control

Software Intern January 2019

Indian Oil Coorporation Limited

Assam, India

• Application for fetching semester results of an institute

Projects

Mobility aware task-offloading in fog assisted networks | IoT, Cloud, Foq, Edge

July 2021 – May 2022

- Optimal offloading mechanism for mobile end-users in distributed systems
- Performing migration in services with long term analysis (vehicular services)
- Minimize the case of migration by doing offloading until it is an essential requisite to perform migration (Since migration incurs some extra cost)
- Implementation: SUMO mobility, MobFogSim, iFogSim

$\textbf{IoT based automated outdoor lighting system} \mid \textit{IoT, Android, Sensors}$

July 2019- February 2020

- Objective was to enhance the maintenance of the current outdoor lighting systems
- Used Thinkspeak as the cloud server to send sensor's data
- Integrated IR, LDR, Current Sensors to detect presence of obstacle, light
- Detection of faulty lights and real-time display in an android application

Other short hand projects

- Face recognition using Python
- Background subtraction and object detection
- Guest house reservation system
- Face mask detector with OpenCV Python
- Home automation systems

Publications & Achievement

- Paper entitled Mobility-aware Task Offloading in Fog-Assisted Networks presented in IEEE GLOBECOM 2022.
- Kakati, S., Ray, K., Deka, R. (2022, June). Cloud and Fog Computing based Industrial IoT Production Management. In 2022 2nd International Conference on Intelligent Technologies (CONIT) (pp. 1-5). IEEE.
- Kakati, S., Chouhan, D., Nag, A., Panja, S. (2022). Survey on Recent Malware Detection Techniques for IoT. In Pattern Recognition and Data Analysis with Applications (pp. 647-659). Springer, Singapore.
- Kakati, S., Deka, R. (2022, June). Computational and Adaptive Offloading in Edge/Fog based IoT environments. In 2022 2nd International Conference on Intelligent Technologies (CONIT) (pp. 1-6). IEEE.
- Book chapter entitled *Green Cloud Computing for IoT based Smart Applications* accepted in Green mobile cloud computing (GMCC 2021).
- Best pitch presenter in the NorthEast Hackathon 2019
- Certificate of merit for securing 10 CGPA in All India Secondary School Examination(AISSE)
- Among top 100 performers in C test , conducted remotely from IIT Bombay with course material provided by the Talk To Teacher project

TECHNICAL SKILLS

Languages: C, Python, C++

Areas of Interest: Cloud/Fog/Edge Computing, IoT

Frameworks: MobFogSim, iFogSim, AVISPA, Netsim, Thinkspeak

Databases: MySQL

Skills: Wireless Mobility, Task Offloading, Migration

EXTRA-CURRICULAR ACTIVITIES

Mentoring: Workshops under ACM Student chapter, Mentored four UG students

Other activities: Musical instruments (Guitar, Ukulele)

Art: Calligraphic Arts