# Rajdeep Ghosh

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#### EDUCATION

Calcutta University

Kolkata, West Bengal

Master of Technology in Computer Science and Engineering

August. 2022 - Present

**CGPA**: 8.66

**Tezpur University** Tezpur, Assam

Bachelor of Technology in Computer Science and Engineering July. 2018 - July. 2022

**CGPA**: 8.44

Maharishi Vidya Mandir Guwahati, Assam

Higher Secondary XII June. 2016 - April 2018

Percentage: 91.6%

Maharishi Vidya Mandir Guwahati, Assam

April. 2014 - April 2016 High School X

**CGPA**: 9.6

#### Work Experience

#### Research Intern in Cloud and Fog Computing

May 2021 – July 2021

CSIR-Central Mechanical Engineering Research Institute (CMERI)

Durgapur, West Bengal, India

- Worked in the specified field of Application Scheduling in Fog and Cloud.
- Studied and implemented my task on Context Aware Decision Making in IoT Fog Cloud based Infrastructure
- Under: Prof. Dr. Rajesh P Barnwal

### Research Intern in Cloud Computing

May 2020 - July 2020

Guwahati, Assam

IIIT Guwahati

- Worked in the specified field of Scheduling in Fog. Studied application placement in Fog and implemented in simulated environment
- Under: Dr. Monojit Ghosh
- Collaborator : Gautam Baishya

#### Publications

# RISP-SDN: Reputation Aware IoMT Service Provisioning Using SDN in Edge/Fog-Based Systems

Ray, K., Medhi, N., Ghosh, R., Das, P., Deka, V.K., Prof. Misra, S. (2023). RISP-SDN: Reputation Aware IoMT Service Provisioning Using SDN in Edge/Fog-Based System. Published in *IEEE Global Communications* Conference (GLOBECOMM) 2023.

#### Performances of M2M Protocols in Internet of Medical Things

Das, K., Dutta, T.L., Ray, K., Ghosh, R., Goswami, D., Dey, A., Phukan, P., Das, P., Deka, V.K., Medhi, N. (2023). Performances of M2M Protocols in Internet of Medical Things. Published in IEEE WS16 ICC'2023 Workshop - SIGNIS 2023.

#### Resource Aware Fog Based Remote Health Monitoring System

Barbhuiya, D.H., Dey, A., Ghosh, R., Das, K., Ray, K., Medhi, N. (2022). Resource Aware Fog Based Remote Health Monitoring System. Published in 2022 IEEE Infocom Workshops (A4E WORKSHOPS).

#### Deep Learning Based Approach For Prediction Of Glass Transaction Temperature In Polymers

Goswami, S., Ghosh, R., Neog, A., Das, B. (2021). Deep Learning Based Approach For Prediction Of Glass Transaction Temperature In Polymers. Published in International Conference on Advances in Material Science, Communication and Microelectronics (ICAMCM) 2021.

#### Serverless Computing | Kubernetes, OpenFaaS, Docker

August 2023 – Ongoing

- Developed a complete Serverless Test Bed for carrying out various FaaS problems using OpenFaaS and Kubernetes in bare metal system as well as in a virtualized system.
- Working on some DDoS attacks to which Serverless Setups can be prone.
- Mentored by : Prof. Nabendu Chaki
- Collaborator: D. Mitra

#### Ensuring QoS in IoMT Using SDN | Python, Cassandra, Shell Script, Java

March 2021 – July 2023

- Working on a MEITY FUNDED Project named "Ensuring QoS in Internet of Medical Things Using SDN".
- Configuring the FOG and Cloud Environment for the given project.
- In this project, a group, including me, developed an IoMT setup with various sensors and, using them, developed a remote patient monitoring system. We propose a bandwidth-guaranteeing and resource-efficient model for the IoMT network using OpenFlow protocol and a simple fog cloud network to decrease the latency of the networking system. The main design consideration of the model is to classify the traffic into different classes and prioritize the classes according to the predefined QoS classes segregated in the FOG System.
- Modeled a resource-aware-based scheduling for incoming medical data packets in the fog nodes.
- Mentored by : Dr. Nabajyoti Medhi
- Collaborator: K. Ray, D.H.Barbhuiya, A. Dey, K.Das, P. Das, T.L.Dutta

#### EduVantu | PHP, SQL

March 2021 - July 2021

- Developed a Online Virtual Classroom System with most features as that of Google Classroom.
- Developed a full-stack web application using PHP as the as the backend along with Bootstrap Framework for the frontend. Am using SQL for the database. Implementing some of basic features as per requirement. To be precise it can be framed as Google Classroom clone with some basic extra features.

#### Satsang E-Book Reader | React Native, PHP, MySQL

February 2021 – August 2021

- Developed a full-stack mobile application using React Native as the frontend and PHP API as the backend along.
- For e-books, bookmarking, highlighting, note-keeping tabs, changing the font size of the text, dark/white theme of the background, eye care mode and also hyperlinking the chapters of the book from the content page to its respective pages (one can easily reach to the topic he/she wants) may also be introduced
- Link: playstore/Satsang E-Book Reader
- Mentored by : Dr. Nabajyoti Medhi
- Collaborator : Adittya Dey

#### Organizations

Training and Placement Cell CSE Student Co-Ordinator	Tezpur University, Tezpur August 2021 – May 2022
Institutes Innovation Council , MHRD Initiative Social Media Student Coordinator	Tezpur University, Tezpur September. 2019 – April. 2022
$ \begin{array}{c} \textbf{IEEE Tezpur University Student Chapter} \\ \textit{Vice Chair} \end{array} $	Tezpur University, Tezpur August. 2018 – January. 2022
NSS Tezpur University  Active Member	Tezpur University, Tezpur August 2018 – July 2020

#### ACHIEVEMENTS

Issued by IIT Kanpur
Best Under Graduate 2022 (Gold Medalist)

Associated with Tezpur University

GATE Qualified 2023

March 2023
Kanpur, Uttar Pradesh, India
December 2022
Tezpur, Assam, India

# TECHNICAL SKILLS

Languages: Python, PHP, C, Java, JavaScript, HTML/CSS

Frameworks: React, Next JS, React Native, Node.js

Developer Tools: Git, VS Code, Visual Studio, Eclipse, Mininet

# Interests

- IoT and Cloud Computing
- Web Development
- App Development