Palash Roy

└ (+880) 1846869580 | ☑ palashroy975@gmail.com | ♠ PalashRoy975 | **in** palash-roy-810a1a183

Education

Department of Computer Science and Engineering, University of Dhaka

MASTER OF SCIENCE (M.S.), CGPA: 3.98/4.00

Dhaka, Bangladesh

2020 - 2022

Department of Computer Science and Engineering, University of Dhaka

BACHELOR OF SCIENCE (B.Sc.), CGPA: 3.85/4.00

Dhaka, Bangladesh 2016 - 2019

Rajuk Uttara Model College

HIGHER SECONDARY CERTIFICATE, GPA: 5.00/5.00

Uttara, Dhaka, Bangladesh

Rangamati Goverment High School

SECONDARY SCHOOL CERTIFICATE, GPA: 5.00/5.00

Rangamati, Bangladesh

2013

Teaching Experience

Green University of Bangladesh

LECTURER, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Dhaka, Bangladesh

October 2020 - PRESENT

Publication _

Journal Paper

- Mohammad Shahjalal, Nusrat Farhana, **Palash Roy**, Md. Abdur Razzaque, Kuljeet Kaur, Mohammad Mehedi Hassan, **A Binary Gray Wolf Optimization algorithm for deployment of Virtual Network Functions in 5G hybrid cloud,** *Computer Communications*, *vol. 193*, *pp. 63-74*, doi: https://doi.org/10.1016/j.comcom.2022.06.041.
- Md. Rajibul Palas, Md. Rakibul Islam, **Palash Roy**, Md. Abdur Razzaque, Ahmad Alsanad, Salman AlQahtani, Mohammad Mehedi Hassan, **Multi-criteria handover mobility management in 5G cellular network,** *Computer Communications, vol.* 174, pp. 81 91, doi: https://doi.org/10.1016/j.comcom.2021.04.020.
- Palash Roy, Sujan Sarker, Md. Abdur Razzaque, Md. Mamun-or-Rashid, Mohammad Mehedi Hassan, Giancarlo Fortino, Distributed Task Allocation in Mobile Device Cloud Exploiting Federated Learning and Subjective Logic, Journal of System Architecture (2020) (IF: 2.55), https://doi.org/10.1016/j.sysarc.2020.101972
- Palash Roy, Sujan Sarker, Md. Abdur Razzaque, Mohammad Mehedi Hassan, Salman AlQahtani, Gianluca Aloi, Giancarlo Fortino, Alenabled Mobile Multimedia Service Instance Placement Scheme in Mobile Edge Computing, Computer Networks, vol. 182, doi: https://doi.org/10.1016/j.comnet.2020.107573.
- Palash Roy, Anika Tahsin, Sujan Sarker, Tamal Adhikary, Md. Abdur Razzaque, Mohammad Mehedi Hassan, **User mobility and Quality-of-Experience aware placement of Virtual Network Functions in 5G,** *Computer Communications, vol. 150, pp. 367 377,* doi: https://doi.org/10.1016/j.comcom.2019.12.005.

Conference Paper

- Sudip Chandra Ghoshal, Md Maruf Hossain, Bishozit Chandra Das, Palash Roy, Md. Abdur Razzaque, Trade-off Between Latency and Energy for Offloading Tasks in Maritime Internet of Things, 2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI), 17-18 Dec, 2022, Dhaka, Bangladesh.
- Md. Daiyan Uddin Mozumder, Riaj Hosen, Md. Mamun Hossain, Md. Ahsan Habib, Palash Roy, Md. Abdur Razzaque, Multiple Circular Ringcanals on the Starfish Routing Backbone in Wireless Sensor Networks, 2022 4th International Conference on Sustainable Technologies for Industry 4.0 (STI), 17-18 Dec, 2022, Dhaka, Bangladesh.
- Sabikun Nahar Tanha, Sowpna Akter Mim, **Palash Roy**, Md. Abdur Razzaque, **Prediction of Energy Harvesting in Solar Powered Small Cell Networks**, 2021 3rd International Conference on Sustainable Technologies for Industry 4.0 (STI), 18-19 Dec, 2021, Dhaka, Bangladesh.
- Rushmita H. Chaity, Palash Roy, Md. Abdur Razzaque, M. Sadiquzzaman, Enhancing Quality of Experience of 5G Users Exploiting Deep Q-Learning, 2021 3rd International Conference on Sustainable Technologies for Industry 4.0 (STI), 18-19 Dec, 2021, Dhaka, Bangladesh. [Best Paper Award]
- M. Shahjalal, N. Farhana, Palash Roy, Md. Abdur Razzaque, QoE Aware Optimal Deployment of Virtual Network Functions in 5G Hybrid Cloud, 2021 3rd International Conference on Sustainable Technologies for Industry 4.0 (STI), 18-19 Dec, 2021, Dhaka, Bangladesh.
- S.M. Tanvir Rahman, A. K. Sinthia, S. Nabila Akter, Palash Roy, Md. Abdur Razzaque, Reputation Aware Fair Worker Selection in Collaborative Software Crowdsourcing, 2021 3rd International Conference on Sustainable Technologies for Industry 4.0 (STI), 18-19 Dec, 2021, Dhaka, Bangladesh.
- Amena Zahan Prithibi, Syeda Kanij Faria, Palash Roy, Md. Abdur Razzaque, Network Lifetime Aware Routing Algorithm for Energy Harvesting Wireless Sensor Networks, 2020 2nd International Conference on Sustainable Technologies for Industry 4.0 (STI), 19-20 Dec 2020, Dhaka, Banqladesh.
- Mozdaher Abdul Quader, Montaser Abdul Quader, Palash Roy, Md. Abdur Razzaque, A Hybrid Approach for Routing Path Computation in Software Defined Ultra Dense Network, 2020 2nd International Conference on Sustainable Technologies for Industry 4.0 (STI), 19-20 Dec 2020, Dhaka, Bangladesh.

Projects

EasyML (Github Link) | (Demo Video)

HTML, JavaScript, Python-Flask,

Firebase

SOFTWARE ENGINEERING LAB PROJECT

2018

EasyML is a web-based **machine learning tutorial** project. By this platform, users can pre-process their data and find tutorial of different ML algorithms like PCA Analysis, Dimension Reduction 2D and 3D, Logistic Regression Classifier, K Neighbors Classifier, Decision Tree Classifier, SVM Classifier and Random Forest Classifier. Furthermore, users also simulate these algorithms using arbitrary datasets.

Helping Hand HTML, JavaScript, Firebase

INTERNET PROGRAMMING LAB PROJECT

2019

Helping Hand is a web based fund collection project by which users can able to prevent fraud donation collection using QR code.

Cardio (Github Link)

HTML, JavaScript, Firebase

SOFTWARE DESIGN PATTERN LAB PROJECT

2010

Cardio is a web application that lets the doctors, patients, sellers and dealers make an account and organize their prescription or medicine stock. Doctors can give suggestions to the patients and write prescription. Patient can download this prescription and offer medicines by this prescription to the sellers.

ExploreBD (Github Link) | (Demo Video)

Java, Firebase

APPLICATION DEVELOPMENT LAB PROJECT

2017

Explore BD is an android mobile app by which users face less problems in the new tourist spot. Users share their experience of a tourist place like hotel information of that place, total expenditure of that tour and users can create an event when they want to make a tour.

29 Card (Github Link)

Java

OBJECT ORIENTED PROGRAMMING LAB PROJECT

2017

This game is developed by JAVA socket programming. In this game we have used JAVA socket programming by which four players can attend in this game at the same time.

Pacman Reborn (Demo Video)

C++

STRUCTURED PROGRAMMING LAB PROJECT

2016

A desktop game developed by C++ and using SFML library. The goal of this game is to eat all foods and avoid getting eaten by ghosts. We have added some special features to make the game easier for player



Programming Languages Python, Java, C/C++

Machine Learning Libraries NumPy, Matplotlib, keras, pandas, scikit-learn

Web Programming HTML, JavaScript, PHP

Database MySQL, Firebase database

Software Tools LATEX, Android Studio, Netbeans, Microsoft Visio, Pycharm, Codeblocks, Cisco Packet Tracer

Achievement

December, **Outstanding Research Award**, Got **Outstanding Research Award** under the Faculty Research Publication 2022 Award 2022 from Center for Research Innovation and Transformation (CRIT), Green University of Bangladesh.

Fellowship Scholarship, Have been provided fellowship by ICT Division, People's Republic of Bangladesh

July, 2020 for conducting extensive research work which can keep significant contributions in the ICT sectors of Bangladesh.

December,
2019

Best Poster Paper Award, Have been awarded the best poster paper award in 1st International
Conference on Sustainable Technology for Industry(STI) 4.0, Dhaka, Bangladesh for our research work
Mobility Aware Optimal Placement of Virtual Network Functions in 5G.

Extracurricular Activities

IEEE Student Branch, Green University of Bangladesh (IEEE SB GUB)

MENTOR November, 2021 - Present

I am mentoring the students of IEEE SB GUB and IEEE CS SBC GUB for organizing the events in GUB by providing some guidelines.

IEEE Computer Society Student Branch Chapter, DU

CHAIR October, 2020 - December, 2022

I have voluntarily organized several events in DU by this organization. I also organized several events in collaboration with IEEE Computer Society, Bangladesh Chapter.

IEEE Computer Society Student Branch Chapter DU

GENERAL SECRETARY AND TREASURER

March, 2019-October, 2020

I voluntarily organized several events in DU by this organization to learn most updated things of our recent technologies those are not taught in our academic curriculum. I also maintained financial budget of those events.

Shabab Murshid Development Foundation (SMDF)

TEACHER July 2017-December 2019

I voluntarily taught Mathematics and English to underprivileged school children of classes 6-10 at **Shabab Murshid Development Foundation** (SMDF).

Reference _____

Name Dr. Md Abdur Razzaque

Designation Professor

Institution Department of Computer Science and Engineering, University of Dhaka

Email razzaque@du.ac.bd **Mobile No** 01841-066390

Name Dr. Md Mamun Or Rashid

Designation Professor

Institution Department of Computer Science and Engineering, University of Dhaka

Email mamun.rashid@gmail.com

Mobile No 01811-475201