Abdus Salam Azad

Contact Information

Lecturer
Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology
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Research Interests

Natural Language Understanding, Information Retrieval, Image Understanding, Machine Learning, Memetic Algorithms

Education

October, 2014 - January, 2017: M. Sc. in Computer Science and Engineering
Department of Computer Science and Engineering (CSE)
Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.
CGPA: 4.00

March, 2009 - June, 2014: B. Sc. in Computer Science and Engineering
Department of Computer Science and Engineering (CSE)
Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.
CGPA: 3.95 (Ranked 3^{rd} in a class of 153 students)

Publications

Abdus Salam Azad, Md. Monirul Islam, and Saikat Chakroborty. **A Heuristic Initialized Stochastic Memetic Algorithm for MDPVRP with Interdependent Depot Operations.** IEEE Transactions on Cybernetics, January, 2017.

Abdus Salam Azad, Md.Kamrul Hasan, M.Arif Imtiazur Rahman, Md.Mustafizur Rahman, and Nashid Shahriar. **Exploring the behavior and changing trends of rainfall and temperature using statistical computing techniques.** In Tanvir Islam, Prashant K. Srivastava, Manika Gupta, Xuan Zhu, and Saumitra Mukherjee, editors, Computational Intelligence Techniques in Earth and Environmental Sciences, pages 53-78. Springer Netherlands, 2014.

Research Experience

Master's Thesis with Prof. Md. Monirul Islam on
A Heuristic Initialized Stochastic Memetic Algorithm for MDPVRP with Interdependent Depot Operations

Undergraduate Thesis with Prof. Md. Monirul Islam on
Diversity Guided Unified Evolutionary Framework for Multi Depot Periodic Vehicle Routing Problem
Winner, 1st Undergraduate Thesis Poster Presentation, 2014, CSE, BUET.

Current Projects

Multi objective learning to rank for citation recommendation
A multi objective learning to rank algorithm for recommending the most relevant works from the literature given an abstract or, research idea as a query.
Co-supervisor: Shubhra Kanti Karmaker Santu
Supervisor: Prof. Mohammed Eunus Ali

Machine Comprehension
A graph-traversal based approach for machine comprehension, i.e., answering questions based on a given piece of text.

Selected Undergrad & Master's Projects

Finding and Describing Images with Sentences
In this study, we analyzed some of the state-of-the-art methods on searching images with sentence description and vice versa.

Content Based Image Retrieval
Implementation of a paper on content-based image retrieval with local-tetra patterns.

Machine Learning & Pattern Recognition Projects
Implementation of Decision Tree (ID3), K-Nearest Neighbor, and Naive Bayesian Classifiers, Artificial Neural Networks, Semi-supervised Learning, Ensemble Learning, and K-means & Bisecting K-means Clustering etc.

Please visit my homepage for a complete list.

Scholarships and Awards

Winner, 1st Undergraduate Thesis Poster Presentation, 2014, CSE, BUET.

Winner, Android Application Development Contest, Samsung R&D, Bangladesh, 2013

Dean's Honor List, BUET

University Merit Scholarship, BUET

Language, Libraries & Platforms

Language: C, C++, Java, Python
Machine Learning Libraries: Scikit-learn, WEKA, Keras, Tensor Flow
Other: R, MatLab, Prolog
Development & Database: Android, Oracle, MySQL, CodeIgniter
Hardware: ATmega32 - Atmel Corporation, Arduino

Community Services

Reviewer
IEEE Transactions on Cybernetics

Organizing Committee Member
WALCOM 2015, NSysS 2015, 2016, 2017

Founding Member
Information and Communication Secretary September 2011 – November 2013
Engineering Students Association of Bangladesh (ESAB)

Employment

Lecturer August 2014 - Present
Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology
Courses Instructed: Artificial Intelligence, Machine Learning, and Microprocessor & Microcontrollers etc.

Non-Academic Projects

As a faculty of the most renowned engineering university in Bangladesh, I have contributed towards different nationally important projects, e.g., Development of Interactive Digital Textbooks, Testing the Software Installed for Machine Readable Passports of 33 Regional Passport Offices, Bangladesh.