

Arifa Islam Champa

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Education

M. Sc.(Engg) in Computer Science & Engineering, 2019 - Present
Islamic University of Technology (IUT)

B. Sc.(Engg) in Computer Science & Engineering, 2013 - 2017
Rajshahi University of Engineering & Technology (RUET)
Thesis: Comparative Analysis of Effective Subspace Detection Techniques for Hyper-spectral Image Classification
CGPA: 3.73/4.00 (8th among 117 students)

Experience

Lecturer 3 September, 2018 - Present
Department of Computer Science & Engineering
Bangladesh Army International University of Science & Technology (BAIUST)

Publications

1. **A. I. Champa**, M. F. Rabbi, S. M. Mahedy Hasan, A. Zaman and M. H. Kabir, "Tree-Based Classifier for Hyperspectral Image Classification via Hybrid Technique of Feature Reduction," **2021 International Conference on Information and Communication Technology for Sustainable Development (ICICT4SD)**, 2021.
2. M. F. Rabbi, S. M. M. Hasan, **A. I. Champa**, M. R. Hossain and M. A. Zaman, A Convolutional Neural Network Model for Screening COVID-19 Patients Based on CT Scan Images, accepted at **International Conference on Big Data, IoT and Machine Learning (BIM 2021)**.
3. S. M. Mahedy Hasan, M. F. Rabbi, **A. I. Champa** and M. A. Zaman, Machine Learning Based Models for Predicting Autism Spectrum Disorders, accepted at **International Conference on Big Data, IoT and Machine Learning (BIM 2021)**.
4. M. F. Rabbi, S. M. M. Hasan, **A. I. Champa** and M. A. Zaman, "A Convolutional Neural Network Model for Early-Stage Detection of Autism Spectrum Disorder," **2021 International Conference on Information and Communication Technology for Sustainable Development (ICICT4SD)**, 2021.
5. S. M. M. Hasan, M. F. Rabbi, **A. I. Champa** and M. A. Zaman, "A Comparative Study of Classification Approaches for COVID-19 Prediction," **2021 International Conference on Information and Communication Technology for Sustainable Development (ICICT4SD)**, 2021.
6. **A. I. Champa**, S. M. M. Hasan, M. A. Rahman and M. F. Rabbi, "Hybrid Technique for Classification of Hyperspectral Image Using Quadratic Mutual Information", **2020 IEEE Region 10 Symposium (TENSYP)**, Dhaka, Bangladesh, 2020, pp. 933-936, doi: 10.1109/TENSYP50017.2020.9230817.
7. S. M. M. Hasan, M. F. Rabbi, **A. I. Champa** and M. A. Zaman, "A Machine Learning-Based Model for Early Stage Detection of Diabetes", **23rd ICCIT, 19-21 December 2020 Dhaka, Bangladesh**.

8. S. M. M. Hasan, M. F. Rabbi, **A. I. Champa** and M. A. Zaman, "An Effective Diabetes Prediction System Using Machine Learning Techniques", **2nd ICAICT, 28-29 November 2020**, Dhaka, Bangladesh.
9. M. F. Rabbi, S. M. M. Hasan, **A. I. Champa**, M. A. Zaman and M. K. Hasan, "Prediction of Liver Disorders using Machine Learning Algorithms: A Comparative Study", **2nd ICAICT, 28-29 November 2020**, Dhaka, Bangladesh.
10. **A. I. Champa**, M. F. Rabbi and N. Banik, "Improvement in Hyperspectral Image Classification by Using Hybrid Subspace Detection Technique", **2019 International Conference on Sustainable Technologies for Industry 4.0 (STI)**, Dhaka, Bangladesh, 2019, pp. 1-5, doi: 10.1109/STI47673.2019.9067973.

Honours & Scholarships

<i>Participant, National Girls Programming Contest</i>	2017
<i>Participant, ICPC (Dhaka Region)</i>	2015
<i>Participant, RUET DAY Programming Contest</i>	2013
<i>Voice of RUET, Inter RUET Debate Competition</i>	2013
<i>University Stipend</i>	2013 - 2017
<i>Secondary School Certificate (SSC) Scholarship</i>	2010

Skills

Programming Languages: Java, C, C++, Python, MATLAB, SQL, Assembly.
Familiar OS: Windows, Ubuntu.
Others: CISCO Packet Tracer, Latex, Oracle.
Communication: Bangla(Native Proficiency), English(Full Professional Proficiency).
Personal: Good analytical & writing skill, problem solving.

Projects

Bus Ticket Management 2016
 Bus Ticket Management was developed on Android platform using Java with the feature of online ticket booking or buying of specific route of various buses.

Semester Guideline 2015
 Semester guideline is a web application designed using CSS, HTML, PHP and MySQL database. The features include posting status, commenting, profile updating, file updating, image sharing and log-in option with verified email.

Save Girls 2013
 Save Girls is an Android application that can send location to a specific person if the victim presses a button.

Training

<i>Advances in Computer Vision: Recent Trends and Application</i>	09-12 December'19
Islamic University of Technology	
<i>Top-Up IT Training (Java)</i>	April'17 - December'17
Bangladesh Computer Council (BCC)	

Extra Curricular Activities

<i>President, NIROB (Nirapod Rokter Bondhon)</i>	2013 - 2017
<i>Founding Member, RCF(Ruet Career Forum)</i>	2015 - 2017
<i>Vice-President, NARS (Narsingdi Association of RUET Student)</i>	2013 - 2017
<i>Volunteer, National High School Programming Contest (NHSPC)</i>	March'16
<i>Volunteer, National Collegiate Programming Contest(NCPC)</i>	September'15

Mentorship & Services	Co-advisor <i>BAIUST Computer Club</i>	<i>September'18- Present</i>
	Program Coordinator <i>Dept. of CSE, BAIUST</i>	<i>October'20- September'21</i>
	Batch Coordinator <i>Dept. of CSE, BAIUST</i>	<i>Spring'19- Spring'20</i>
Teaching	<i>Conducted Courses:</i> <ul style="list-style-type: none"> • Data Structures • Algorithms • Computer Fundamental and Basic Programming • VLSI Design • Applied Statistics 	