Y A JOARDER

4080 Rue Cool Apt. 8, Verdun,

QC H4G 1B4 Canada Cell: +1(438) 368-9095 Email: <u>yajoarder@gmail.com</u> LinkedIn: linkedin.com/in/yajoarder

Languages: English (Fluent) & French (Beginner)

PROFESSIONAL SUMMARY:

- PhD Candidate in Information and Systems Engineering at Concordia University, Montreal, Canada;
- 4.5 years of experience as Graduate Research Assistant in Bangladesh and Canada;
- 3.4 years of teaching experience in CSE and Cybersecurity in Bangladesh and Canada;
- 1.9 years of experience as Software Testing Engineer and IT Analyst in Bangladesh and Canada;
- Researcher in Cybersecurity, IoT, IIoT, IoV, IoE, Artificial Intelligence and Data Science;
- Professional expertise in QUIC, Machine Learning, Deep Learning and Cloud Computing;
- Excellent analytical capacity, organizing efficiency, meticulous approach & problem-solving aptitude;
- Commendable leadership quality, team-work skills & autonomy with perfection even under pressure.

EDUCATION:

Ph.D. (Doctor of Philosophy) 2021 – Current

Information & Systems Engineering,

Concordia Institute for Information Systems

Engineering (CIISE), Concordia University, Montreal, Quebec, Canada

M.Sc. (Master of Science) 2014 – 2015

Department of Information & Communication Engineering,

Islamic University (IU), Bangladesh

CGPA 3.59 (out of 4.00)

B.Sc. (Bachelor of Science) 2010 – 2014

Department of Information & Communication Engineering,

Islamic University (IU), Bangladesh

CGPA 3.30 (out of 4.00)

PROFESSIONAL EXPERIENCE:

1. Graduate Research Assistant (GRA)January 2021 – Current

Current Lab: Next Generation Network

Security (NGNSec) Lab,

Concordia Institute for Information Systems

Engineering (CIISE), Concordia University, Montreal, Quebec, Canada

2. Graduate Teaching Assistant (GTA) September 2021 – Current

Concordia University, Montreal, Quebec, Canada

Teaching Assistantship Details:

• Concordia Institute for Information Systems Engineering (Sep. 2022 – Current) Teaching Assistant: Network Security Architecture and Management (INSE 6170)

• Dept. of Computer Science and Software Engineering (Jan. 2022 - Jun. 2022) Teaching Assistant: Principles of Programming Languages (COMP 348)

• Dept. of Electrical and Computer Engineering (Jan. 2022 - Apr. 2022) Teaching Assistant: Programming Methodology -1 (COEN 243)

• Dept. of Computer Science and Software Engineering (Sep. 2022 – Current) Teaching Assistant: Data Communications & Computer Networks (COMP 445)

• Concordia Institute for Information Systems Engineering (Jan. 2022 - Apr. 2022) Teaching Assistant: Cryptographic Protocols and Network Security (INSE 6120)

• Centre for Engineering in Society (Sep. 2021 – Current)
Teaching Assistant: Professional Practice and Responsibility (ENGR 201)

3. 9441-0503 Quebec Inc September 2021 – January 2022

Department of Computer Science & Engineering (CSE), World University of Bangladesh (WUB), Dhaka, Bangladesh

4. Lecturer July 2018 – September 2020

Department of Computer Science & Engineering (CSE), World University of Bangladesh (WUB), Dhaka, Bangladesh

5. Research Assistant (RA) June 2015 – July 2018

Computer Vision & Intelligent Interfacing Lab (CVIIL),

Islamic University (IU), Bangladesh

6. Software Testing Engineer February 2016 – June 2017

Part time employee (12 hours in a week through online)

Spider IT Ltd., Dhaka, Bangladesh

SKILLS OF SOFTWARE, SYSTEM & HARDWARE:

• Languages: C, C++, Python, Java, JavaScript, VBScript, PHP, HTML5, CSS3, Prolog, Bash

• Parallel Computing: MPI, CUDA, EC2, Elastic MapReduce, Hadoop, Spark

- Tools: OpenCV, WEKA, OpenStack, Cisco Packet Tracer, Cloud Foundry, Kubernetes, Docker, AWS, GCP, Azure, Keras, TensorFlow, Jira, Arduino, Raspberry Pi
- Scientific Computing: MATLAB, Mathematica, NumPy, SciPy, Pandas, Scikit, PyTorch, Matplotlib
- Applications: LATEX, Adobe Photoshop, MS Office, Model Checkers: UPPAAL, SMV, NuSMV, MS Power BI, MS SharePoint, MS Teams
- Cyber-Security Related Tools: Acunetix, Wireshark, Zed Attack Proxy (ZAP), Burp Suite, Invicti, Intruder, Nmap, Metasploit, Aircrack-Ng, OpenVAS, SQLMap, NetStumbler, Ettercap, Maltego, Nikto, John The Ripper, Angry IP Scanner, WPScan, Hydra, SET, BeEF, Fern and Autopsy
- Operating Systems: Linux, macOS, Microsoft Windows
- DBMS: NoSQL: MongoDB, SQL: MySQL, Oracle
- SCM Tools: Git, Gitlab, GitHub

PUBLICATIONS:

INTERNATIONAL CONFERENCES:

- Y A Joarder and Carol J Fung, "A Survey on the Security Issues of QUIC" in 6th Cyber Security in Networking Conference (CSNet 2022), will be held in Rio de Janeiro (Brazil) next October 24 – 26, 2022. (Accepted in September 2022)
- 2. Gaith Rjoub, Jamal Bentahar and **Y A Joarder** (2022). Active Federated YOLOR Model for Enhancing Autonomous Vehicles Safety. In: Awan, I., Younas, M., Poniszewska-Marańda, A. (eds) Mobile Web and Intelligent Information Systems. MobiWIS 2022. Lecture Notes in Computer Science, vol 13475. Springer, Cham.

https://link.springer.com/chapter/10.1007/978-3-031-14391-5 4

3. **Y. A. Joarder**, Paresh Chandra Barman, and Md Zahidul Islam, "Enhancement of ANN-based Offline Hand Written Character Recognition Using Gradient and Geometric Feature Extraction Techniques" in the preceding of International Conference on Human-Computer Interaction, Vancouver, Canada, July 2017, pp 145-151

[Only one research work accepted from Bangladesh in poster category]

4. Y. A. Joarder, Bipul Hossain, Md Jashim Uddin, and Md Zahidul Islam – "A Novel Hand Written Technique Using Touch-Less Finger Gesture Movement for Human Computer Interaction" in: Kurosu M. (eds) Human-Computer Interaction. Interaction Technologies. HCI 2018. Lecture Notes in Computer Science, vol 10903. Springer, Cham. HCI 2018: <u>Human-Computer Interaction. Interaction Technologies</u> pp 285-296

https://link.springer.com/chapter/10.1007/978-3-319-91250-9_22

[Only one research work accepted from Bangladesh in paper category]

5. Bipul Hossain, Feroza Naznin , **Y. A. Joarder**, and Md Zahidul Islam – "Recognition and Solution for Handwritten Equation Using Convolutional Neural Network" in Joint 2018 7th International Conference on Informatics, Electronics & Vision (ICIEV) & 2nd International Conference on Imaging, Vision & Pattern Recognition (icIVPR), Kitakyushu, Japan.

https://ieeexplore.ieee.org/document/8640991

INTERNATIONAL JOURNALS:

6. **Y. A. Joarder**, Kh. Mustafizur Rahman, & Ahsan Ullah. (2019). "A Hybrid Partitioning Algorithm for Robust Big Data Clustering and Analysis" in Journal of Network Security and Data Mining, 2(3), 1–16.

http://doi.org/10.5281/zenodo.3465227

7. **Y. A. Joarder**, Feroza Naznin, Md Abdul Awal and Md Zahidul Islam — "An Improved Hybrid Evolutionary Clustering Algorithm to Mitigate Empty Clustering Problem" in International Journal of Computer Engineering and Information Technology (IJCEIT) 11, no. 9 (2019): 193-199.

http://www.ijceit.org/published/volume11/issue9/index.php

8. **Y. A. Joarder**, Kh. Mustafizur Rahman, & Fabiha Faiz Mahi. (2020). "Uplifted Tissue Characterization and Classification of Fatty Liver Disease from Ultrasound Images" in Advancement in Image Processing and Pattern Recognition, 3(3), 1–13.

https://zenodo.org/record/4014957

BOOK CHAPTERS:

- 1. Part of the Communications in Computer and Information Science book series (CCIS, volume 713)
- 2. Part of the <u>Lecture Notes in Computer Science</u> book series (LNCS, volume 10903)

POSTER PAPER:

1. **Y. A. Joarder** and Md. Safar Uddin Dipu – "Point Detection Based A Smart Pen Featured Listening and Writing Capable Robotic Arm" In the proceedings of International Workshop on Computer Vision and Intelligent Systems (IWCVIS 2019), 26 December 2019; BRAC University, 66 Mohakhali, Dhaka-1212, Bangladesh.

http://iwcvis.bracu.ac.bd/?fbclid=IwAR3668GDW0h1Nwl8ZRpBrfk7Uz2645O52XsPnI1vbzQHIykZKXvVwLOZfDM

IN PREPARATION:

1. Y. A. Joarder, Emran Hossain, and Al Faisal Mahmud – "Clustering and Classification with Non-Existence Features: A Sentenced Dissimilarity Measure Based Technique" in arXiv library in of Cornell University, Ithaca, New York.

https://arxiv.org/abs/2002.10411v1

2. Y. A. Joarder, and Mosabbir Ahmed — "A Hybrid Algorithm Based Robust Big Data Clustering for Solving Unhealthy Initialization, Dynamic Centroid Selection and Empty clustering Problems with Analysis" in arXiv library in of Cornell University, Ithaca, New York.

https://arxiv.org/abs/2002.09380

ACADEMIC THESIS: (in M.Sc.)

1. A Novel Hybrid Model Algorithm for Robust Big Data Clustering and Analysis

ACADEMIC PROJECTS: (in B.Sc.)

- 1. Improvement of ANN-based Offline Handwritten Character Recognition Using Gradient and Geometric Feature Extraction Techniques
- 2. University Library Automation System

PARTICIPATIONS & ORAL PRESENTATION:

1.	International Cybersecurity Forum FIC North America 2022, Montreal, Canada	2022
2.	Online Research Talk on "QUIC Protocol and Its Past, Current and Future"	2022

Dhaka, Bangladesh						
Department of Informati	on and Cor	nmunicatio	n Technolo	gy (DoI	ICT) Research Lab,	

3. International workshop on Computer vision and Intelligent Systems (IWCVIS)	2019
BRAC University (BRACU), 66 Mohakhali,	
Dhaka-1212, Bangladesh	

4.	International Workshop on Computer Vision and Application (IWCVA)	2019
	Southeast University (SU), Tejgaon Campus,	
	Dhaka, Bangladesh	

5.	National Collegiate Programming Contest:	2018
	IUBAT NCPC 2018	
	Date: August 03, 2018 - August 04, 2018	
	Ranking: 46	

2017

2012

2017 International Conference on	
Networking, Systems and Security (NSysS),	

Networking, Systems and Security (NSysS), Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

7.	International Collegiate Programming Contest:	2017
	ACM ICPC 2017 Dhaka Regional Contest	
	Date: November 11 & 12, 2017	
	Hosted By: University of Asia Pasific	
	Ranking: 88	
	Team: IU_sudo	

8.	BRB Cables NDF BD 3rd National Debate Festival '07	2007
	Organized by National Debate Federation Bangladesh (NDF BD)	
	Kushtia Zilla School, Kushtia, Bangladesh	

SCOLARSHIP:

2. Champion, Intra University Literary Competition

Team: IU_Valak

6.

1.	Concordia 1	International Tuit	on Award of Ex	cellence	2021	Ĺ
----	-------------	--------------------	----------------	----------	------	---

AWARDS:

1. Muhammad Qudrat-i-Khuda Science Speaker Award	2017
The best research work award in Bangladesh,	
Issued by the Red-Green Research Centre, Dhaka, Bangladesh	

Islamic University, Kushtia, Bangladesh

3. 1st, Kushtia Science Fair (Math Competition) Kushtia, Bangladesh 2006

4. Champion, District Primary School Debate Competition Kalkini Model Primary school, Kalkini, Madaripur, Bangladesh 2001

LEADERSHIP EXPERIENCE:

 Proctor, Collegiate Penetration Testing Competition (CPTC) Concordia University, Montreal, Quebec, Canada 2022

2. General Secretary, Student Association of ICE (SAICE), Department of Information and Communication Engineering, Islamic University, Bangladesh 2015-2016

ACADEMIC TRAINING:

- 1. Academic Research and Paper Writing from Scratch
- 2. Networking Training
- 3. Linux (Ubuntu, Kali)
- 4. PLC training
- 5. Microcontroller training
- 6. IoT (Internet of Things)
- 7. Teaching Learning Assessment and Research Methodology training by IQAC-WUB

MEMBERSHIP:

- 1. Golden Key International Honour Society
- 2. International Association of Engineers (IAENG)
- 3. Bangladesh Computer Society

REVIEWER:

- 1. IEEE Transactions on Knowledge and Data Engineering (TKDE)
- 2. Informatics in Medicine Unlocked (Elsevier)
- 3. Computer Networks
- 4. International Conference on Network and Service Management

REFEREES:

Dr. Carol Fung

Associate Professor

Gina Cody Research Chair in Cybersecurity & the Internet of Things Concordia Institute for Information Systems Engineering (CIISE) Concordia University

Montreal, Quebec, H3G 2W1, Canada

Email: carol.fung@concordia.ca

Dr. Bikash Chandra Singh

Professor
Post-doc Fellow,
Old Dominion University,
Virginia, USA and
Professor,
Dept. of Information &
Communication Technology (ICT)
Islamic University (IU), Bangladesh
Cell Phone: +17574527189

Email: bsingh@odu.edu

bikash.singh@ice.iu.ac.bd bikash070@gmail.com

I hereby declare that all the information provided herein is true and accurate.

Y A Joarder

Montreal, Canada