

## Y A JOARDER

1515 Ste-Catherine Street West, EV 003.222,  
Montreal, Quebec, Canada,  
H3G 2W1

Cell: +1(438) 368-9095

Email: [yajoarder@gmail.com](mailto:yajoarder@gmail.com) , [ya.joarder@concordia.ca](mailto:ya.joarder@concordia.ca)

Website: <https://y-a-joarder-portfolio.web.app/>

Languages: English (Fluent) & French (Beginner)

---

### **PROFESSIONAL SUMMARY:**

- ✚ PhD Candidate in Information and Systems Engineering at Concordia University, Montreal, Canada
- ✚ 4.5 years of combined experience as a 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 industry experience as a Software Testing Engineer and IT Analyst in Bangladesh and Canada
- ✚ Researcher in Cybersecurity, IoT, IIoT, IoV, IoE, Artificial Intelligence (AI), ML, and Data Science
- ✚ Professional expertise in QUIC Protocol, Machine Learning, Deep Learning and Cloud Computing
- ✚ Excellent analytical capacity, organizing efficiency, meticulous approach & problem-solving aptitude
- ✚ Commendable leadership quality, teamwork skills & autonomy with perfection even under pressure
- ✚ Over 3 years of experience in Big Data Analytics, Hadoop, Java, Python Database Administration, and Software development expertise
- ✚ A deep understanding of network protocols, firewalls, intrusion detection and prevention systems, and network security technologies
- ✚ A proficient understanding of symmetric and asymmetric encryption methods, digital signatures, and public-key infrastructure (PKI)
- ✚ Knowledge of security frameworks including NIST, ISO 27001, and SANS
- ✚ Expertise in conducting vulnerability assessments and penetration testing, as well as familiarity with tools such as Metasploit, Nessus, and Burp
- ✚ Knowledge of SIEM solutions and familiarity with log analysis and correlation tools
- ✚ Familiarity with web security tools like OWASP ZAP and knowledge of online security flaws like cross-site scripting (XSS) and SQL injection
- ✚ Expertise in cloud security issues, such as the privacy and confidentiality of data, and in setting up security measures for cloud systems
- ✚ Expertise in the security of operating systems like Windows, Linux, and Unix, as well as knowledge of security technologies like SELinux and AppArmor
- ✚ Expertise in malware analysis techniques, including reverse engineering and dynamic analysis, as well as experience using tools like IDA Pro and OllyDbg for malware analysis
- ✚ Experience with data protection legislation, including GDPR and HIPAA, and expertise in implementing data protection policies
- ✚ A deep understanding of the basics of networking, including the transport layer, application layer, network protocols, and QUIC protocol

- ✚ Expertise in the design, implementation, and security aspects of the QUIC protocol and in evaluating and testing the protocol
- ✚ A deep understanding of cryptography methods and protocols, such as TLS and encryption algorithms, and experience using cryptography with the QUIC protocol
- ✚ In-Depth Expertise in QUIC Protocol Security Assessments, Threat Modeling, and Risk Analysis
- ✚ In-depth understanding of known security flaws in the QUIC protocol and expertise in doing vulnerability assessments and penetration testing
- ✚ Expertise in implementing the QUIC protocol in a variety of settings, including cloud, edge, and IoT, and familiarity with QUIC implementation tools, such as Chromium and ngtcp2
- ✚ Expertise in improving the QUIC protocol for speed, scalability, and security, as well as familiarity with QUIC performance and optimization tools like Wireshark and tcpdump
- ✚ Specialist knowledge of modelling and testing the QUIC protocol in a variety of network settings, as well as familiarity with network simulation tools such as ns-3 and Mininet
- ✚ Expertise in programming languages, including C, C++, Python, and JavaScript, as well as experience developing applications for the QUIC protocol
- ✚ Experience ensuring the QUIC protocol follows industry standards and rules, such as those from IETF and ISO
- ✚ Strong hands-on experience in Hadoop Framework and its ecosystem, including HDFS Architecture, MapReduce Programming, Hive, Pig, Sqoop, HBase, Zookeeper, Couchbase, Storm, Solr, Oozie, Spark, Scala, Flume, Storm, Kafka
- ✚ Excellent knowledge of Hadoop Architecture and ecosystems such as HDFS, Job Tracker, Task Tracker, Name Node, Data Node, and Map Reduce programming paradigm
- ✚ Experience in analyzing data using HIVEQL and Pig Latin and custom Map Reduce programs in Java and Scala
- ✚ Experience in strong and analyzing data using HiveQL, Pig Latin, HBase, and custom Map Reduce programs in Java and Hadoop Streaming, MRJob, and PySpark in Python
- ✚ Experience in importing and exporting data into HDFS and Hive using Sqoop
- ✚ Good knowledge of Amazon AWS concepts like EMR & EC2 web services which provide fast and efficient processing of Big Data
- ✚ Experience in Azure Cloud environments, Cosmos DB, ADL Gen1, and ADL Gen2
- ✚ Good hands-on experience with Azure Databricks environment
- ✚ Hands-on experience in installing and configuring Cloudera's Apache Hadoop ecosystem components like Flume-ng, HBase, Zookeeper, Oozie, Hive, Spark, Storm, Sqoop, Kafka, Hue, Pig, Hue with CDH3&4 Clusters
- ✚ Architected, Designed, and maintained high-performing ELT/ETL Processes

- ✚ Skilled in managing and reviewing Hadoop log files
- ✚ Experienced in loading data to Hive partitions and creating buckets in Hive
- ✚ Familiarity with distributed coordination system Zookeeper
- ✚ Involved in designing and deploying a multitude of an application utilizing the entire AWS stack (Including EC2, RDS, VPC, and IAM), focusing on high availability, fault tolerance, and auto-scaling.
- ✚ Experienced in implementing unified data platforms using Kafka producers/ consumers and implementing pre-processing using storm topologies
- ✚ Good knowledge of building Apache spark applications using Scala
- ✚ Experience in developing and designing POCs using Scala and deployed on the Yarn cluster, compared the performance of Spark with Hive and SQL/Teradata
- ✚ Done Administration, installing, upgrading, and managing distributions of DataStax Cassandra Cluster.
- ✚ Strong database development skills using Database servers like Oracle and My SQL, and hands-on experience with SQL, PL/SQL
- ✚ Extensive experience in backend database programming in an oracle environment using PL/SQL with tools such as TOAD
- ✚ Have a particularly good understanding and working with relational databases like MySQL, Oracle, and NoSQL databases like HBase, Mongo DB, Couchbase, and Cassandra.
- ✚ Good work experience on JAVA, JAVA 8, JDBC, Servlets, JSP.
- ✚ Proficient in Java, J2EE, JDBC, Collections, Servlets, JSP, Struts, Spring, Hibernate, JAXB, JSON, XML, XSLT, XSD, JMS, WSDL, WADL, REST, SOAP Web services, CXF, Groovy, Grails, Jersey, Gradle, and Eclipse Link.
- ✚ Good knowledge in performance troubleshooting and tuning Cassandra clusters and understanding of Cassandra Data Modeling based on applications.
- ✚ Skilled in developing applications in Python and PySpark language for multiple platforms, familiarity with the process and Python software development

## **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

---

#### **Summaries:**

- ✚ Conduct in-depth research on the QUIC protocol and its security features
- ✚ Analyze and evaluate the security of the QUIC protocol and identify potential vulnerabilities
- ✚ Develop and implement new security mechanisms for the QUIC protocol

- ✚ Collaborate with other researchers to evaluate the security and performance of the QUIC protocol in real-world scenarios
- ✚ Write and publish research papers, technical reports, and articles on the security of the QUIC protocol
- ✚ Participate in conferences and workshops to present research results and collaborate with other researchers
- ✚ Mentor and collaborate with graduate students and postdoctoral researchers on research projects related to the QUIC protocol
- ✚ Stay up-to-date with the latest developments and advancements in the field of network security and the QUIC protocol
- ✚ Implement and test prototypes of the QUIC protocol to evaluate its security and performance
- ✚ Collaborate with industry and other academic institutions on research projects and initiatives related to the QUIC protocol
- ✚ Develop and maintain code and documentation for research projects and prototypes
- ✚ Contribute to the development of standards and best practices for the security of the QUIC protocol

#### Environment (Languages and Tools):

- 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

## **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. 2023 – Current)  
Teaching Assistant: Computer Networks and Protocols (INSE 6170)
- Dept. of Computer Science and Software Engineering (Jan. 2022 - Current)  
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 – Dec 2022)  
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. IT Analyst

September 2021 – January 2022  
9441-0503 Quebec Inc  
1221 Rue Mackay, Montreal, QC,  
Canada, H3G2H5

---

#### Summaries:

- ✚ Analyze and Plan, Research & Communicate Approach: Partner with Project Managers, engineers, researchers, and physicians to oversee the user experience of a product from conception until launch. contribute to high-level decisions with the rest of the product team
- ✚ Experience in developing Spark applications using Spark-SQL in Azure Databricks for Data extraction, transformation, and aggregation from multiple file formats for analyzing & transforming the data to uncover insights into customer usage patterns
- ✚ Maintained the Azure Databricks Cluster, Azure Cosmos DB, and Azure Data Lake storage
- ✚ Responsible for connections with Azure data lake Gen2 and moving data Gen1 to Gen2 using Databricks
- ✚ Collaborated with various teams & management to understand the requirement & design the complete system
- ✚ Experience in Hadoop Administration Big Data Ecosystems such as – HDFS, Map Reduce, Yarn, Sqoop, Hive, HBase, Oozie, Kafka, and Spark
- ✚ Installation and configuration of HDP 2.6.5 & Ambari 2.6.2 clusters
- ✚ Design and capacity planning of Clusters
- ✚ Maintenance and support of Clusters
- ✚ Development and Implementation: Architect efficient and reusable data processing systems that drive complex applications
- ✚ Good understanding of Hadoop Architecture and underlying Hadoop framework
- ✚ Knowledge of Google Cloud Infrastructure & Architect
- ✚ Knowledge of Apache Spark open-source data analytics clusters computing framework
- ✚ Implement high-quality backend systems across several programming languages with a focus on Python and Java
- ✚ Control Quality: worked every day for production exceptions and rejection
- ✚ Collaborate with team members about daily production issues and resolve those
- ✚ Server updates and installations of the software on clusters
- ✚ Administered, maintained, provisioned, patched, and maintained HDP Hadoop clusters on Linux
- ✚ Integrated different data sources and data wrangling: cleaning, transforming, merging, and reshaping data sets by writing Python scripts
- ✚ Worked with Ambari 2.5, 2.6.5, and 3.1.0 and different components
- ✚ Worked with Sqoop to ingest & retrieve data from various RDBMS like DB & MYSQL
- ✚ Installing and configuring Ambari's Apache Hadoop ecosystem components like Ambari Cluster Security, installing Kerberos on clusters

- ✚ Designing ETL Data Pipeline flow to ingest the data from RDBMS source to Hadoop using a shell script, Sqoop, package, and MySQL.
- ✚ Used Spark API over Cloudera Hadoop YARN to perform analytics on data in Hive developed Spark code and Spark-SQL/Streaming for faster testing and processing of data.
- ✚ Complete end-to-end design and development of Apache NiFi flow, which acts as the agent between the middleware team and EBI team and executes all the actions mentioned above.
- ✚ Involved in Cluster maintenance, Cluster Monitoring, Troubleshooting, Managing, and reviewing data backups and log files.
- ✚ Worked on NoSQL databases, including HBase and Cassandra.
- ✚ Good Knowledge of the Cloud platform of AWS and Google Cloud Infrastructure.

**Environment:** HDP 2, HDFS, Hadoop, Azure Databricks, Azure Cloud, ADL Gen1, ADL Gen2, Cosmo DB, Putty, AQT, Python, MapReduce2.7.2, EMR, EC2, S3, Hive2.0, Yarn, Agile Methodology, Java, Oozie, HBase0.98.19, Kafka0.10.1.1, Spark2.0, Linux.

#### 4. Lecturer of CSE

July 2018 – September 2020

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

---

As a lecturer of computer science and engineering, you used to teach and supervise students in various courses related to big data processing, data engineering, Hadoop ecosystem, distributed systems, data warehousing, data pipeline development, Spark programming, Hadoop administration, data visualization and so on.

##### Summaries:

- ✚ Teach undergraduate courses in computer science and engineering
- ✚ Have experience in end-to-end data processing including ingestion, processing, quality checks and splitting
- ✚ Have experience in developing Spark scripts using Scala
- ✚ Have experience in loading data into Spark and performing in-memory data computation to generate output responses
- ✚ Have experience in performing various transformations and actions on RDD to meet project requirements
- ✚ Have experience in developing a data pipeline using Kafka, Spark and Hive for ingestion, transformation and data analysis
- ✚ Have experience in analyzing Hadoop clusters and different big data analytic tools including Pig, HBase, and Sqoop
- ✚ Have experience in loading data from the UNIX file system to HDFS
- ✚ Have experience in creating HBase tables to store variable data formats of PII data
- ✚ Have experience in implementing best offer logic using Pig scripts and Pig UDFs
- ✚ Responsible for managing data from various sources
- ✚ Have experience in loading and transforming structured, semi-structured, and unstructured data
- ✚ Have experience in cluster coordination services through Zookeeper
- ✚ Have experience in exporting analyzed data to relational databases using Sqoop for visualization and generating reports for the BI research team
- ✚ Have experience in analyzing large amounts of data sets to determine the optimal way to aggregate and report on them
- ✚ Have experience in setting up QA environment and updating configurations for implementing scripts with Pig and Sqoop

- ✚ Have experience in implementing Spark sample programs in Python using Spark
- ✚ Have experience in managing and reviewing Hadoop log files
- ✚ Have experience in importing data using Sqoop to load data from MySQL to HDFS on a regular basis
- ✚ Have experience in developing scripts and batch jobs to schedule various Hadoop programs
- ✚ Have experience in writing Hive queries for data analysis to meet business requirements
- ✚ Have experience in creating Hive tables and working on them using HiveQL
- ✚ Have experience in importing and exporting data into HDFS and Hive using Sqoop
- ✚ Have experience in designing and implementing Map Reduce-based large-scale parallel relation-learning systems
- ✚ Have experience in scheduling the Oozie workflow engine to run multiple Hive jobs
- ✚ Have experience in developing parser and loader map-reduce applications to retrieve data from HDFS and store in HBase and Hive
- ✚ Have experience in developing Spark code to mimic transformations performed in on-premise environments
- ✚ Have experience in importing unstructured data into HDFS using Flume
- ✚ Have experience in using Oozie to orchestrate map and reduce jobs to extract data in a timely manner
- ✚ Have experience in using the HBase Java API in Java applications
- ✚ Have experience in automating all jobs for extracting data from different data sources like MySQL and pushing the result set data to Hadoop Distributed File System
- ✚ Have hands-on experience in designing and developing applications using Hive (UDF)
- ✚ Have experience in writing Hive Queries for analyzing data in Hive warehouse using Hive Query Language (HQL)
- ✚ Have experience in importing and exporting data from MySQL/Oracle to HiveQL using Sqoop
- ✚ Responsible for defining the data flow within the Hadoop ecosystem and directing student project teams in implementing them

**Project-based Used Environment:** Hadoop, MapReduce2.7.2, Hive2.0, Pig0.16, Sqoop2, Java, Oozie, HBase0.98.19, Kafka0.10.1.1, Spark2.0.

## 5. Research Assistant (RA)

June 2015 – July 2018  
Computer Vision & Intelligent Interfacing Lab (CVIIL),  
Islamic University (IU), Bangladesh

- 
- ✚ Collaborated with other researchers and teams to design and implement computer vision and Data Science projects
  - ✚ Involved in end-to-end data processing like ingestion, processing, quality checks and splitting
  - ✚ Developed Spark scripts by using Scala as per the requirement
  - ✚ Load the data into Sparked and performed in-memory data computation to generate the output response
  - ✚ Performed different types of transformations and actions on the RDD to meet the business requirements
  - ✚ Developed a data pipeline using Kafka, Spark and Hive to ingest, transform and analyzing data
  - ✚ Also worked on analyzing Hadoop cluster and different big data analytic tools including Pig, HBase and Sqoop.
  - ✚ Involved in loading data from UNIX file system to HDFS
  - ✚ Created HBase tables to store variable data formats of PII data coming from different portfolios
  - ✚ Implemented best offer logic using Pig scripts and Pig UDFs
  - ✚ Responsible to manage data coming from various sources
  - ✚ Experience on loading and transforming of large sets of structured, semi structured, and unstructured data.
  - ✚ Cluster coordination services through Zookeeper



- ✚ Exported the analyzed data to the relational databases using Sqoop for visualization and to generate reports for the BI Research team
- ✚ Analyzed large amounts of data sets to determine optimal way to aggregate and report on it
- ✚ Responsible for setting up QA environment and updating configurations for implementing scripts with Pig and Sqoop
- ✚ Implemented Spark sample programs in python using Spark
- ✚ Involved in managing and reviewing Hadoop log files
- ✚ Imported data using Sqoop to load data from MySQL to HDFS on regular basis
- ✚ Developing Scripts and Batch jobs to schedule various Hadoop programs
- ✚ Responsible for writing Hive queries for data analysis to meet business requirements
- ✚ Responsible for creating Hive tables and working on them using HiveQL
- ✚ Responsible for importing and exporting data into HDFS and Hive using Sqoop
- ✚ Designed and implemented Map Reduce-based large-scale parallel relation-learning system
- ✚ Involved in scheduling the Oozie workflow engine to run multiple Hive jobs
- ✚ Developing parser and loader map-reduce application to retrieve data from HDFS and store it to HBase and Hive
- ✚ Developed Spark code to mimic the transformations performed in the on-premise environment
- ✚ Importing the unstructured data into the HDFS using Flume
- ✚ Used Oozie to orchestrate the map and reduce jobs that extract the data in a timely manner
- ✚ Involved in using HBase Java API on Java applications
- ✚ Automated all the jobs for extracting the data from different Data Sources like MySQL to push the result set data to Hadoop Distributed File System
- ✚ Hands-on design and development of an application using Hive (UDF)
- ✚ Responsible for writing Hive Queries for analyzing data in Hive warehouse using Hive Query Language (HQL)
- ✚ Importing and exporting Data from MySQL/Oracle to HiveQL Using SQOOP
- ✚ Responsible for defining the data flow within the Hadoop ecosystem and directing the team in implementing them

**Environment:** OpenCV, Hadoop, MapReduce2.7.2, Hive2.0, Pig0.16, Sqoop2, Java, Oozie, HBase0.98.19, Kafka0.10.1.1, Spark2.0.

## 6. Software Testing Engineer

February 2016 – June 2017  
 Part-time employee (12 hours a week online)  
 Spider IT Ltd.,  
 Dhaka, Bangladesh

---

### Summary:

- ✚ Designed, developed, and executed manual and automated tests to ensure software quality
- ✚ Worked closely with the business analysts to convert the Business Requirements into Technical Requirements and prepare low and high-level documentation
- ✚ Performing transformations using Hive, MapReduce, hands-on experience in copying .log, snappy files into HDFS from Greenplum using Flume & Kafka, loaded data into HDFS and extracted the data into HDFS from MYSQL using Sqoop



- ✚ Involved in preparing the S2TM document as per the business requirement and worked with Source system SME's in understanding the source data behaviour
- ✚ Imported required tables from RDBMS to HDFS using Sqoop and used Storm/ Spark streaming and Kafka to get real-time streaming of data into HBase
- ✚ Experience in Writing Map Reduce jobs for text mining and worked with predictive analysis team and Experience in working with Hadoop components such as HBase, Spark, Yarn, Kafka, Zookeeper, PIG, HIVE, Sqoop, Oozie, Impala and Flume
- ✚ Wrote HIVE UDF's as per requirements and to handle different schema's and xml data
- ✚ Designing and developing MapReduce jobs to process data coming in different file formats like XML, CSV, JSON
- ✚ Implemented MapReduce programs to handle semi/ unstructured data like XML, JSON, Avro data files and sequence files for log files
- ✚ Developed Spark applications using Scala for easy Hadoop transitions. And Hands on experienced in writing Spark jobs and Spark streaming API using Scala and Python
- ✚ Installed Oozie workflow engine to run multiple Hive and Pig jobs
- ✚ Designed and developed User Defined Function (UDF) for Hive and Developed the Pig UDF'S to pre-process the data for analysis as well as experience in (UDAFs) for custom data specific processing
- ✚ Assisted in problem solving with Big Data technologies for integration of Hive with HBase and Sqoop with HBase
- ✚ Designed and developed the core data pipeline code, involving work in Java, Python and built on Kafka and Storm
- ✚ Good knowledge on Partitions, bucketing concepts in Hive and designed both Managed and External tables in Hive for optimized performance
- ✚ Performance tuning using Partitioning, bucketing of IMPALA tables
- ✚ Hands on experience on fetching the live stream data from DB2 to HBase table using Spark Streaming and Apache Kafka
- ✚ Experience in job workflow scheduling and monitoring tools like Oozie and Zookeeper

**Environment:** Jira, Bugzilla, Agile, Scrum, Waterfall, Map Reduce, HDFS, Hive, Pig, HBase, Python, SQL, Sqoop, Flume, Oozie, Impala, Scala, Spark, Apache Kafka, Zookeeper, J2EE, Linux Red Hat, HP-ALM, Eclipse, Elasticsearch, Cassandra, Talend.

## **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)

**PUBLICATIONS:****INTERNATIONAL CONFERENCES:**

1. **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.

<https://ieeexplore.ieee.org/document/9955622>

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](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

[https://link.springer.com/chapter/10.1007/978-3-319-58750-9\\_20](https://link.springer.com/chapter/10.1007/978-3-319-58750-9_20)

[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: [Human-Computer Interaction. Interaction Technologies](#) pp 285-296

[https://link.springer.com/chapter/10.1007/978-3-319-91250-9\\_22](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 [Lecture Notes in Computer Science](#) 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. Proctor<br>Global Collegiate Penetration Testing Competition (CPTC),<br>Concordia University,<br>Montreal, Canada   | 2022 |
| 2. International Cybersecurity Forum<br>FIC North America 2022,<br>Montreal, Canada  | 2022 |
| 3. Online Research Talk on "QUIC Protocol and Its Past, Current and Future"<br>Department of Information and Communication Technology (DoICT) Research Lab,<br>Dhaka, Bangladesh | 2022 |
| 4. International Workshop on Computer Vision and Intelligent Systems (IWCVIS)<br>BRAC University (BRACU), 66 Mohakhali,<br>Dhaka-1212, Bangladesh                                | 2019 |
| 5. International Workshop on Computer Vision and Application (IWCVA)<br>Southeast University (SU), Tejgaon Campus,<br>Dhaka, Bangladesh  | 2019 |
| 5. 2017 International Conference on<br>Networking, Systems and Security (NSysS),<br>Bangladesh University of Engineering and Technology (BUET),<br>Dhaka, Bangladesh             | 2017 |
| 6. BRB Cables NDF BD 3rd National Debate Festival '07<br>Organized by National Debate Federation Bangladesh (NDF BD)<br>Kushtia Zilla School, Kushtia, Bangladesh                | 2007 |

**SCHOLARSHIPS:**

- |  |              |
|--|--------------|
| 1. Concordia International Tuition Award of Excellence       | 2021         |
| 2. Supervisor's Research Grants and Faculty Research Support | 2021-Current |

**AWARDS:**

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

- |   |      |
|---|------|
| 2. Champion, Intra University Literary Competition<br>Islamic University, Kushtia, Bangladesh                           | 2012 |
| 3. 1 <sup>st</sup> , Kushtia Science Fair (Math Competition)<br>Kushtia, Bangladesh                                     | 2006 |
| 4. Champion, District Primary School Debate Competition<br>Kalkini Model Primary school, Kalkini, Madaripur, Bangladesh | 2001 |

### **LEADERSHIP EXPERIENCE:**

- |   |           |
|---|-----------|
| 1. Proctor, Collegiate Penetration Testing Competition (CPTC)<br>Concordia University,<br>Montreal, Quebec, Canada                                      | 2022      |
| 2. General Secretary, Student Association of ICE (SAICE),<br>Department of Information and Communication Engineering,<br>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
8. HackConcordia Volunteership 2023

### **MEMBERSHIPS:**

1. Golden Key International Honour Society
2. International Association of Engineers (IAENG)
3. Bangladesh Computer Society
4. Bangladesh Student Association of Concordia (BSA Concordia)
5. Graduate Student Association of Concordia, Member
6. Golden Key International Honour Society, Member
7. BSA Concordia, Member
8. Concordia Athletics Club

### **REVIEWERS:**

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

### **INTERESTS:**

Watching Web Series and movies, Photography, Cycling, Music, Hiking, Public Speaking, Playing Cricket

### **REFERENCE:**

References Available Upon Request

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

**Y A Joarder**  
Montreal, Canada