

SABBIR MUHAMMAD SALEH

14-457 Platt's Lane, London, ON, N6G 3H2; (519) 657-8343; ssaleh47@uwo.ca

LinkedIn: <https://www.linkedin.com/in/sabbirmsaleh/>

PROFILE SUMMARY

University-level educator with over 7 years of teaching experience, specialising in optimisation, mathematical modelling, and applied analytics. Experienced in delivering graduate-level content integrating linear, integer, and nonlinear programming with practical business applications. Strong record of research, industry collaboration, and case-based teaching for technical and managerial decision-making.

EDUCATION

Doctor of Philosophy (PhD - in progress), Computer Science

January 2021 – Present

The University of Western Ontario, London, ON

- Specialization: Human Computer-Interaction and Software Engineering
 - Supervisor: Professor Dr. Nazim H. Madhavji
- Courses: Information Visualization, Machine Learning, Unstructured Data, Artificial Intelligence II
Software Design and Architecture, Software Engineering for Big Data Applications and Analytics, Introduction to Data Science

Master of Science, Computer Science

January 2014 – December 2015

American International University – Bangladesh (AIUB), Dhaka

- Specialization: Software Engineering
 - Supervisor: Professor Dr. Khandaker Tabin Hasan
- Demonstrated Master's thesis: Comparative Study on Different Software Methodologies Based on Two Start-Up Companies
 - Thesis Supervisor: Professor Dr. S. A. M. Manzur H. Khan

Bachelor of Science, Computer Science

May 2009 – December 2013

American International University – Bangladesh (AIUB), Dhaka

- Final Year Project: Face Finder Android Application
 - Supervisor: Avishek Ahmed
- Internship: Software Engineer – eAKASH BD Ltd. (**August 2013 - December 2013**)
 - Supervisor: Professor Dr. Dip Nandi

RELEVANT EXPERIENCE

Professor (Part-Time)

Winter 2024 – Fall 2025

School of Information Technology, **Fanshawe College**, London, ON, Canada

Courses:

Software Design Patterns (Winter 2024)

Python Programming (Summer 2025, Winter 2025, Fall 2024)

Network Enterprise Technologies and Fundamentals (Fall 2025)

Lecturer (Limited Duties)

Fall 2024 – Winter 2025

*Department of Computer Science, **University of Western Ontario**, London, ON, Canada*

Course Taught: **Game Development Project** – Fourth year Course (4000-level)

Achievement: **Supervised 25 students in completing their final-year Projects (Minor in Game Development)**

*Department of Electrical and Computer Engineering, **University of Western Ontario**, London, ON, Canada*

Course Taught: **Programming for Engineers (Python)** – Graduate Level Course (9000-level)

Graduate Research Assistant (Graduate Fellow)

January 2021 – Present

*Department of Computer Science, **University of Western Ontario**, London, ON, Canada*

Working closely with Professor Nazim H. Madhavji

Co-supervised one Graduate Student (MSc in Computer Science)

Co-supervised eight Undergraduate Students (Honors Specialization in Computer Science)

Graduate Teaching Assistant

Department of Computer Science, *University of Western Ontario, London, ON, Canada*

CS 2211 – **Software Tools & Systems Programming**
CS 1027 – **Computer Science Fundamentals II**
CS 1032 – **Information Systems and Design**
CS 3307 – **Object-Oriented Design and Analysis**
CS 2034 – **Data Analytics: Principles and Tools**
CS 4471 – **Software Design and Architecture**

Summer 2025, Fall 2024
Summer 2024
Summer 2024, Summer 2021
Winter 2024, Fall 2023
Winter 2023
Fall 2022

Assistant Professor (*ON STUDY LEAVE SINCE APRIL 2021*) – 03 years

Department of Computer Science and Engineering
City University, Dhaka, Bangladesh

April 2018 – April 2021

Lecturer - 3.5 years

Department of Computer Science and Engineering
University of South Asia, Dhaka, Bangladesh

November 2014 – April 2018

Responsibilities in the above roles: **Lecturer and Assistant Professor**

- Department/Program Coordinator
- Prepared updated syllabus and Outcome-Based Curriculum (OBC) for the CSE Department
- Prepared course materials for students
- Provided lectures and conducted labs
- Supervised Undergraduate Final Year Students' projects (more than 50 students over the six and half years)

Lecturer

July 2014 – November 2014

Department of Information & Communication Technology
Stamford College, Dhaka, Bangladesh

Achievement: Established a High-End Computer Laboratory for the High School students

Computer Instructor (Part-Time Basis)

April 2012 – July 2014

Non-Government Organization's ORPHANS' Trainer (Computer Fundamentals)
Taught more than 150 High School students

RESEARCH WORKS and SELECTED PUBLICATIONS

Conference Papers (Double / Triple Peer Reviewed)

1. **Saleh, Sabbir M.**, Nazim Madhavji and John Steinbacher, (2024). A Systematic Literature Review on Continuous Integration and Deployment (CI/CD) for Secure Cloud Computing. In Proceedings of the 20th International Conference on Web Information Systems and Technologies - Volume 1: WEBIST; ISBN 978-989-758-718-4, SciTePress, pages 331-341. DOI: <https://doi.org/10.5220/0013018500003825>
2. **Saleh, Sabbir M.**, Nazim Madhavji and John Steinbacher, "Blockchain for Securing CI/CD Pipeline: A Review on Tools, Frameworks, and Challenges," 2024 7th Conference on Cloud and Internet of Things (CIoT), Montreal, QC, Canada, 2024, pp. 1-5, <https://doi.org/10.1109/CIoT63799.2024.10757084>
3. **Saleh, Sabbir M.**, Ibrahim Mohammed Sayem, Nazim Madhavji and John Steinbacher. 2024. Advancing Software Security and Reliability in Cloud Platforms through AI-based Anomaly Detection. In Proceedings of the 2024 Cloud Computing Security Workshop (CCSW '24) co-located with the ACM Conference on Computer and Communications Security (CCS), October 14–18, **2024**, Salt Lake City, UT, USA. **ACM**, New York, NY, USA, 10 pages <https://doi.org/10.1145/3689938.3694779>
4. **Saleh, Sabbir M.**, Nazim Madhavji and John Steinbacher, "Enhancing the Cloud Security through Topic Modelling," 2024 IEEE/ACIS 28th International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD), December 04-06, 2024. IEEE. (accepted, presented, yet to publish) <https://doi.org/10.48550/arXiv.2505.01463>

5. **Saleh, Sabbir M.**, Nazim Madhavji and John Steinbacher, "Towards a Blockchain-Based CI/CD Framework to Enhance Security in Cloud Environments," 2025 20th International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE), April 04-06, 2025. Technically co-sponsored by IEEE. DOI: <https://doi.org/10.5220/0013298200003928>
6. **Saleh, Sabbir M.**, "DevSecLogs: AI-Powered, Tamper-Evident Log Intelligence for Secure CI/CD Pipelines," 2025 IEEE International Conference on Software Maintenance and Evolution (ICSME), Auckland, New Zealand, 2025, pp. 890-894, DOI: <https://doi.org/10.1109/ICSME64153.2025.00101>
7. **Saleh, Sabbir M.**, Nazim Madhavji and John Steinbacher, "Toward Stage-Aware Container Security in CI/CD: A Practical Review", International Conference On Systems Engineering 2025, October 27-28, 2025, Warsaw, Poland. **(accepted and presented, yet to be published)**
8. **Saleh, Sabbir M.**, Md Nafiz Al Ifat, Nazim Madhavji and John Steinbacher, "A Threat-Oriented Study of API Security Challenges in CI/CD Pipelines," 2025 IEEE International Conference on Cloud Computing Technology and Science (CloudCom), November 14-16, 2025, Shenzhen, China, 2025. **(accepted and presented, yet to be published)**
9. **Saleh, Sabbir M.**, Md Nafiz Al Ifat, Nazim Madhavji and John Steinbacher, 2025. A Defence-Oriented Study of API Security in CI/CD Pipelines. In Proceedings of the 2025 10th International Conference on Cloud Computing and Internet of Things (CCIOT '25). Association for Computing Machinery, New York, NY, USA. **(accepted and presented, yet to be published)**
10. **Saleh, Sabbir M.**, Nazim Madhavji and John Steinbacher, 2025. Systematic Review of Identity-Centric Security in Cloud-Native CI/CD Pipelines. In Proceedings of the 2025 10th International Conference on Cloud Computing and Internet of Things (CCIOT '25). Association for Computing Machinery, New York, NY, USA. **(accepted and presented, yet to be published)**

FOR MORE: https://scholar.google.com/citations?hl=en&user=mm7bYG4AAAAJ&view_op=list_works&sortby=pubdate

RESEARCH & PROJECT HIGHLIGHTS

- Developed resource allocation optimization methods for secure CI/CD pipelines.
- Applied CNN-LSTM hybrid model for anomaly detection and decision-support in cloud analytics.
- IBM Cloud project: Integrated topic modelling and optimization-based alert scoring in CI/CD logs.

REVIEWER OF JOURNALS (SCOPUS INDEXED)

1. Journal of Computer Science (January 2020 – Present)
ISSN Print: 1549-3636 ISSN Online: 1552-6607
SCOPUS indexed Journal – <https://www.scopus.com/sourceid/11700154336>
2. Advances in Science, Technology and Engineering Systems Journal (ASTESJ) (March 2020 – Present)
ISSN Online: 2415-6698
SCOPUS indexed Journal – <https://www.scopus.com/sourceid/21100898760>
3. International Journal of Information Technology and Web Engineering (IJITWE) (September 2022 – Present)
ISSN Print: 1554-1045 ISSN Online: 1554-1053
SCOPUS indexed Journal – <https://www.scopus.com/sourceid/11900154400>
URL: <https://dl.acm.org/journal/ijitwe-igi>
4. IEEE Transactions on Computational Social Systems (TCSS) (October 2022 – Present)
ISSN Online: 2329-924X
URL: <https://www.ieeesmc.org/publications/transactions-on-computational-social-systems/>
5. Information and Software Technology (IST) (November 2022 – Present)
ISSN Online: 0950-5849
URL: <https://www.sciencedirect.com/journal/information-and-software-technology/>
6. IGI Global - International Journal of Software Innovation (IJSI)
ISSN: 2166-7160 EISSN: 2166-7179
SCOPUS indexed Journal – <https://www.scopus.com/sourceid/21100823281>
URL: <https://dl.acm.org/journal/ijsi>

PC MEMBER OF CONFERENCES:

1. IEEE International Conference on Software Maintenance and Evolution (ICSME) **2026** – Tool Demonstration and Data Showcase Track

REVIEWER OF CONFERENCES:

1. International Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ) **2026**
2. IEEE International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA) **2026**
3. IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE) **2021, 2023, 2025**
4. IEEE International Requirements Engineering Conference (RE) **2025**
5. IEEE International Humanitarian Technology Conference (IEEE IHTC) **2025**
6. ACM International Conference on Computing Advancements (ICCA) **2024**
7. International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE) **2023, 2024**
8. IEEE International Conference on Mechanical, Automotive and Mechatronics Engineering (ICMAME) **2023**
9. Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA) **2023**
10. IEEE International Conference on Electrical, Computer and Energy Technologies (ICECET) **2022**
11. IEEE International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME) **2022**

EDITORIAL BOARD MEMBER

1. Bangladesh Journal of Public Health (BJPH) ISSN : 2518-3737 – Assistant Editor (December 2017 – Present)
2. International Journal of Information Technology and Web Engineering (IJITWE) (January 2024 – Present)
ISSN Print: 1554-1045 ISSN Online: 1554-1053

SCOPUS indexed Journal – <https://www.scopus.com/sourceid/11900154400>

ADMINISTRATIVE, PROCTORIAL and other EXPERIENCE in UNIVERSITY

Proctor

October 2022 – Present

Departments: Nursing, Biology, Mathematics, Physics and Astronomy, Engineering
The University of Western Ontario, London, ON, Canada

Department/Program Coordinator (Manager) – 2 years

April 2019 – April 2021

Department of Computer Science and Engineering
City University, Dhaka, Bangladesh

Department/Program Coordinator (Manager) – 3+ years

November 2014 – April 2018

Department of Computer Science and Engineering
University of South Asia, Dhaka, Bangladesh

At both upper positions, **Department/Program Coordinator (Manager)**, I provided comprehensive advising to students, prepared class and exam routines, assigned proctorial duties, etc., and handled administrative work.

Western Safety Ambassador

May 2022 – February 2023

The University of Western Ontario, London, ON, Canada

Health and Safety Advisor

November 2021 – April 2022

The University of Western Ontario, London, ON, Canada

INDUSTRIAL EXPERIENCE

Magento Database Officer (Night Shift)

July 2014 – October 2014

Helix IT Solutions, Dhaka, Bangladesh

Programmer & Analyst

January 2014 – June 2014

Krishibid Group, Dhaka, Bangladesh

Software Engineer

August 2013 – December 2013

eAKASH BD Ltd., Dhaka, Bangladesh

Research and Development Project Manager (Remote)

August 2020 – January 2024

TechViduals Software Development

Service and leadership

- Graduate Student Constituency, University Secretariat: Senate Member (Jul 2024 – Jun 2025).
- Society of Graduate Students (SOGS), Western University: Councillor, Department of Computer Science (Fall 2021 – Fall 2022).
- SOGS committees:
 - Subsidies Committee (Member, Summer 2022 – Present);
 - Academic Committee (Member, Summer 2025 – Fall 2025);
 - International Graduate Students Issues Committee (IGSIC) (Member, Fall 2021 – Winter 2023);
 - Graduate Students Issues Committee (Member, Fall 2021 – Winter 2023)
- AIUB Oratory Club, American International University–Bangladesh:
 - President (Jul 2013 – Jul 2014);
 - Assistant General Secretary (Apr 2012–Jul 2013);
 - Debater/Public Speaker (Jun 2009 – Apr 2012).

Additional activities

- Advisor, City University Computer Club (Summer 2018 – Fall 2020)
- Team coach, Inter University Programming Contest (2015), Bangladesh;
- Team coach, RESONANCE V9.0 (2017), India.

REFERENCES

Dr. Nazim H. Madhavji

Professor

Computer Science, Western University
Middlesex College, London, ON, N6A 3K7

e. madhavji@gmail.com

c. 519-871-1227

Dr. S. M. Ibrahim Al-Rafia

Senior Product Development Scientist

3M Canada
London, ON, N5V 4M9

e. alrafia@ualberta.ca

c. 403-608-4761

Dr. Mohammed Ashikur Rahman

Associate Professor, Computer Science & Engineering

Southeast University
Dhaka, Bangladesh

<https://seu.edu.bd/employee/profile/MDAzNDY5>

Tel # +880-1735-524483 (Cell)

ashikur.rahman@seu.edu.bd

Syed Maruful Huq

Assistant Professor, Computer Science & Engineering

Northern University Bangladesh

Dhaka, Bangladesh

<https://nub.ac.bd/pims/faculty-member/dgilwasp/syed-maruful-huq>

Tel # +880-1975-077044 (Cell)

maruful@gmail.com