

Rahman Ziaur, PhD

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💡 HIGHLIGHT

- Have been teaching for 12 years in Bangladesh & Cyber Security teaching & work Experiences in Australia
- Have professional Cyber Security certifications from IBM, Amazon, Infosec, SkillsSoft, EC Council
- Completed PhD in Cyber Security; Thesis classified as outstanding (Top 5%)
- Received HDR Computing Technologies Prize by RMIT for research and community contributions
- Conducted high quality research; articles published in the top IEEE Journals, received Best Paper Award



📁 EXPERIENCE

Mawlana Bhashani Science & Technology University (MBSTU)

APR 2013 – Oct 2025

Full Professor [Full-time], Dept. of Information & Communication Technology (ICT)

Tangail, Bangladesh

- Previously served as Lecturer (2013-16), and Assistant Prof (2016-20), Associate Prof (2020-25) in ICT
- Beside academic teaching served as the Director of the Cybersecurity Center of MBSTU for a year
- Served MBSTU Quality Review and Ranking Committee (QRRC) as the Secretary since Dec 2024
- Was the Chair of Systems Security and Innovation - SSI Lab in collaboration with Int'l researchers
- Served as the Python Trainer for the [EDGE Project-P161086](#) supported by World Bank
- Coordinated Cyber Security and Programming courses, associated labs via LMS (Canvas); [Course Lists](#)
- Pursued research, published articles, attended conferences, received [Best Paper Award](#)
- Supervised Master's (8) and Bachelor's (15) theses and Capstone projects (10).
- Was one of the Organisers to host Int'l Conference, National High School Programming Contest
- Co-founded and maintained MBSTU virtual judge system <http://103.28.121.75>
- Served as a Java Trainer for the World Bank [LICT project](#) for the period (206-2017) under ICT Division
- Manager: Prof. DR. [Mohammad Motiur Rahman](#), Dean, Faculty of Engineering, MBSTU



Queensland University of Technology (QUT)

APR 2023 – Oct 2024

Research Fellow in Cybersecurity [Full-time, Level B]

Brisbane, QLD, Australia

- Project name: SOCRATES: Software Security with a Focus on Critical Technologies (Work Package 1 & 6)
- Collaborators: CyberCRC, Dept. of Home Affairs, Federal Police, NSW & WA govt., ACSC, CSIRO & CISCO
- WP6 Research Area: Post-quantum software security, Lattice-based signature, NIST, ETSI PQ Standards
- WP1 Research Area: Identifying Open-source Software Risk propagation using graph theory, i.e., PyPI, etc
- Tools and Platform: Python 3.7, Python NetworkX, Gephi, Linux Ubuntu (High Performance System at QUT)
- Manager: Prof. [Raja Jurdak](#), Director of the Trusted Networks (TruNets) Lab, QUT



Charles Sturt University (CSU)

AUG 2022 – MAR 2023

Research Assistant [Casual (1 FTE), Level A], Faculty of BJBS

Bathurst, NSW, Australia

- Project: HEALTHDM - System Refinement and Early Adoption
- Designed, developed and deployed machine learning-based medical web-application
- The project collaborated with the CSU and Murrumbidgee Local Health District, NSW
- Presented the deliverable in the meetings; liaise with the team members from academy and industry
- Tools and Platform: Python 3.7, Java, MySQL, JavaScript, Django, AWS EC2 Ubuntu
- MLHD test application: <http://healthdmttool.xyz/>
- Project-II GitHub Repository: [HEALTHDM-CSU](#)
- Project Manager: Prof. [Mark Morrison](#), Associate Dean, Research, Charles Stuart University



RMIT University

Project Research [Contract, Level B], School of Property, Construction & Management

MAR 2022 – AUG 2022

Melbourne, Australia

- Project: Blockchain-based sustainable development for the Solar Decathlon China (SDC)
- Tools and Platform: Hyperledger Fabric, Java, Go, NodeJS, Python, AWS EC2 Ubuntu
- Designed and developed Blockchain-based application for the BIPV Inc.
- As a part of DevOps, deployed the the project on the Amazon EC2 server
- Mentored research students in their research; presented the deliverable; liaise with the team members
- Live application: <http://13.236.146.191:3000>
- GitHub Repository: [BIPV-DOC-SHARING](#)
- Project Manager: Prof. [Rebecca Yang](#), DSC, RMIT University



EDUCATION

RMIT University (City Campus)

SEP 2018 – MAR 2023

PhD in Cybersecurity, with full Scholarship

Melbourne, Australia

- * Thesis title: Blockchain-based AI-enabled Data Protection for the Internet of Things
- * Date of Degree Conferral : March 31, 2023
- * Key contributions:
 - i) Authentication : Blockchain based certificate-less authentication and identity management
 - ii) Secure data exchange : Transparent data exchange and monitoring using consortium
 - iii) APT Detection : AI-enabled advanced persistent threat detection
- * Received Higher Degree by Research Award for academic and research excellence
- * Secured Runner-up position in the RMIT Three Minute Thesis Competition
- * Thesis Selected as Outstanding - Top 5% by the Reviewing Panel. Thesis Archival Ref. [RMIT Repository](#)




Islamic University of Technology (IUT)

JAN 2013 – OCT 2015

Masters in Computer Science & Engineering, Funded through teaching assistantship)

Gazipur, Bangladesh

- * Thesis title: Enhancing Software Development Process using Data Mining Integrated Environment
- * Date of Degree Conferral: 23 OCT 2015
- * Result: 3.38 Position:1ST
- * Key contributions (on thesis 
 - i) Coding : Providing an efficient development environment with improved source codes abstraction
 - ii) Recommendation : XML based recommendation from the mined repository on the client-side
 - iii) Mapping : Most relevant code skeletons using graph-based technique



Shenyang University of Chemical Technology

SEP 2012 – JUL 2012

Bachelor in Software Engineering, with University Scholarship

Shenyang, China

- * Bachelor Thesis: Cyber Police: An Idea
- * Date of Degree Conferral: 1 JUL 2012
- * Result: 3.92 Position:1ST
- * Bachelor Thesis Ref. [scholar citations](#)



TRAINING AND CERTIFICATIONS

Queensland University of Technology (QUT), Australia

Oct 2024

Teaching Excellence program

Brisbane, Australia

IBM, USA

Nov 2025

Certification on Penetration Testing, Threat Hunting, and Cryptography

Coursera

Infosec Institute, USA

Nov 2025

Certified Cloud Security Professional (CCSP)

Coursera

Amazon Web Services (AWS), USA

Nov 2025

Certification on Security, Compliance, and Governance for AI Solutions

Coursera

Vanderbilt University, USA
Certification on Prompt Engineering for Large Language Models

Nov 2025

Coursera

EC Council, USA
Certification on Information Security Fundamentals

Nov 2025

Coursera

Australian Computer Society (ACS)
Continuing Professional Development (CPD)

JUL 2020 – DEC 2024

Melbourne, Australia

PROGRAMMING SKILLS

* Backend Languages

 Java

 Python

 C++

 JavaScript

- * Database Languages: MySQL, Oracle, MS Access, MariaDB, PostgreSQL, SQLite
- * Development Framework : Python - Django, Spring Boot, REST API
- * Operating System : Windows 11, Raspberry PI, Ubuntu, Mac, etc.
- * Blockchain, Cloud & IoT Platform: Hyperledger Fabric, Ethereum, Amazon EC2, Arduino, MS Azure
- * Cybersecurity Protocols: AES, RSADSA, ECDSA, Hash/Isogeny/Lattice primitives, Learning with Error
- * Machine Learning Algorithms: DT, RF, KNN, K-means, CNNs, LSTMs, RNNs, GANs, ResNet, IncepNet, LeNet
- * Python ML Libraries: NetworkX, Scikit-learn, TensorFlow, Keras, PyTorch, etc.
- * IDE & Statistical Tools: IntelliJIDEA, VS Code, NetBeans, Selenium, MyEclipse, MATLAB, R, SPSS
- * Editing, Multimedia & Design Tools: Adobe Illustrator, Photoshop, Premiere Pro, Prezi, Latex, MS Office



AWARDS & ACCOLADES

Higher Degree by Research Award

JUL 6 2022

STEM College, RMIT University

Melbourne, Australia

- * HDR Award in Computing Technologies
- * For research excellence and student community contributions
- * PhD Thesis selected as Outstanding - Top 5% by the panel.

Three Minute Thesis Presentation

AUG 8 2022

RMIT STEM College

Melbourne, Australia

- * Presentation on How blockchain technology secures internet of things?
- * Secured Runned-up position within the STEM College

Best Paper Award

2015-2021

RMIT School of Computing (SCT)




Dhaka, Melbourne










- * IEEE Conference: Wiecon-ECE, 19-20 December 2015, Dhaka
- * Solid State Electronics Letters: January 2021, USA
- * JCT Institutions Engineering & Polytechnic, December 26 2017, Tamil Nadu, India

SELECTED PUBLICATIONS

Journal Articles




[Google Scholar](#) , [ReserachGate](#) 

- Datta, A., Hasan, M. M., Mahmud, N., Ferdosi, B. J., Islam, R., **Rahman, Z.**, & Mehedi, S. T. "Preserving medical information from doctors prescription ensuring relation among the terminology," *Computers in Biology and Medicine*, Vol. 188, no. 109812, 2025. 
- **Z. Rahman**, I. Khalil, X. Yi and M. Atiquzzaman, "Blockchain-Based Security Framework for a Critical Industry 4.0 Cyber-Physical System," in *IEEE Communications Magazine*, vol. 59, no. 5, pp. 128-134, May 2021. 
- **Z. Rahman**, X. Yi and I. Khalil, "Blockchain based AI-enabled Industry 4.0 CPS Protection against Advanced Persistent Threat," in *IEEE Internet of Things Journal*, January 2022. 

- S. T. Mehedi, A. Anwar, **Z. Rahman**, et al., "Dependable Intrusion Detection System for IoT: A Deep Transfer Learning-based Approach," in *IEEE Transactions on Industrial Informatics*, April 2022. 
- **Z. Rahman**, X. Yi, Billah, Mustain, M. Sumi and A. Anwar. "Enhancing AES Using Chaos and Logistic Map-Based Key Generation Technique for Securing IoT-Based Smart Home." *Electronics* 11, no. 7: 1083. March 2022. 
- **Z. Rahman**, Yi, X., Mehedi, S., Islam, R. and Kelarev, A., 2022. "Blockchain Applicability for the Internet of Things: Performance and Scalability Challenges and Solutions." in *Electronics*, 11(9), p.1416. 
- B. Mustain; A. Anwar; **Z. Rahman**; et al, "Bi-Level Poisoning Attack Model and Countermeasure for Appliance Consumption Data of Smart Homes." *Energies* 14, no. 13: 3887, June 2021. 
- A. Rahman, M. Kamal, **Z. Rahman** et al., "DistB-Condo: Distributed Blockchain-Based IoT-SDN Model for Smart Condominium," in *IEEE Access*, vol. 8, pp. 209594-209609, 2020. 
- A. Rahman, M. K. Nasir, **Z. Rahman**, et al., "DistBlockBuilding: A Distributed Blockchain-Based SDN-IoT Network for Smart Building Management," in *IEEE Access*, vol. 8, pp. 140008-140018, 2020. 
- Amiri, IS, Rashed, Ahmed Nabih Zaki, **Z. Rahman**, et al., "Conventional/Phase Shift Dual Drive MachZehnder Modulation Measured Type Based Radio over Fiber Systems " *Journal of Optical Communications*, April 2020. 
- Fida Hasan, K., Simpson, L., Rezazadeh Bae, M.A., Islam, C., **Rahman, Z.**, et al., 2023. Migrating to Post-Quantum Cryptography: a Framework Using Security Dependency Analysis. *IEEE Access* 
- M. Abdullah-Al-Shafi and **Z. Rahman**, "Analysis and modeling of sequential circuits in QCA nano computing: RAM and SISO register study. *Solid State Electronics Letters*, July 2019, 1(2), pp.73-83. 

Conference Articles

[Google Scholar](#)  , [ReserachGate](#) 

- **Z. Rahman**, X. Yi, I. Khalil et al., "Blockchain-based and Fuzzy Logic-enabled False Data Discovery for the Intelligent Autonomous Vehicular System." In *The 18th ACM ASIA Conference on Computer and Communications Security (ACM ASIACCS)*, Melbourne, 2023. 
- **Z. Rahman**, X. Yi, I. Khalil et al., "Blockchain for IoT: A Critical Analysis Concerning Performance and Scalability." In *International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness*, pp. 57-74. Springer, Cham, 2021. 
- M.H. Rahman, **Z. Rahman**, et al., "Software Process Improvement Based on Defect Prevention Using Capability and Testing Model Integration in Extreme Programming." In *2nd International Conference on Cyber Security and Computer Science (ICONCS 2020)*, vol 325. Springer, Cham. 

GRANT PREPARATION & FUNDING EXPERIENCES

Funding by Data Science Research Unit (DSRU)

2020-2021

Charles Sturt University

Wagga Wagga, NSW

- Project Title: Consortium Blockchain-based Secure and Efficient agri-food Data Management System
- Collaborators: Islam, Rafiqul (CI); **Ziaur, Rahman**; Anwar, Adnan; Fear, Diana; Haque, Shamsul; Islam; Zahid
- CSU Theme & Code: 4604 - **Cybersecurity & Privacy**
- Industry Partner: Central West Farming System (CWFS), NSW
- Funding Amount : **\$20,000.00**

Higher Education Acceleration and Transformation (HEAT) Project

Feb, 2025

Queensland University of Technology

Dhaka

- Project Title: Advancing Sustainable Farming in Bangladesh using Vision AI and Unmanned Aerial Vehicle
- Collaborators: **Ziaur, Rahman**, Badrul Alam; Nargis Akter; Mahmud Alam
- Under Submission