# CURRICULUM VITAE MD. MINHAZ CHOWDHURY

Phone: 7012059350, email: <u>mchowdhur1@esu.edu, minhazc@gmail.com</u> LinkedIn: <u>https://www.linkedin.com/in/md-minhaz-chowdhury-61117440/</u> Google Scholar: <u>https://scholar.google.com/citations?user=0GkEhNAAAAAJ&hl=en</u>

I am a tenure track assistant professor of the computer science department at the East Stroudsburg University of Pennsylvania. East Stroudsburg University is the National Centre of Academic Excellence in Cyber Defence Education, designated by DoD and NSA. I was the interim director and graduate coordinator for the Cyber program at the same university from March 2019 to August 2021, for 2.5 years.

#### Education

08/2013-	North Dakota	PhD	Deception in Cyberspace: Con-Man Attack in Cloud Services	08/2013-
08/2018	State		Dissertation focus: cyber security	08/2018
	University		Academic Adviser:	
			Dr Kendall E. Nygard( <u>kendall.nygard@ndus.edu</u> )	
08/2009-	North Dakota	MS	An artificial immune system heuristic in a smart electrical	08/2009-
08/2014	State		grid	08/2014
	University		Dissertation focus: artificial immune system, smart	
			electrical grid	
			Academic Adviser: Dr Kendall E. Nygard	
05/2005-	Daffodil	BS	Performance evaluation of mobile ad hoc network routing	05/2005-
05/2008	International		protocols using NS2 simulations.	05/2008
	University		Academic Adviser: Dr M. Lutfar Rahman	

### **Work Experience**

Work Experience	
Tenure track assistant professor of the computer science department at the	August 2018 to present
East Stroudsburg University of Pennsylvania	
Assistant director for the Cyber program at the East Stroudsburg university	September 2021 to present
Interim director and graduate coordinator for the Cyber program at the East	March 2019 to August 2021
Stroudsburg university	
Assistant director for the Cyber program at the East Stroudsburg university	February 2019
Software Developer as a Graduate Research Assistant at North Dakota State	2015 March-2015 November
University, at AES Dickinson R/E Center.	
Supervisor: Joseph Latimer (joseph.latimer@ndsu.edu)	
Programmer at Blue Cross Blue Shield of North Dakota	September 2012-February
Supervisor: Joseph Johnson	2015
Robert Williams ( <u>rcw1701@hotmail.com</u> , Phone: 7012005059)	
Graduate Research Assistant (at North Dakota State University Computer	January 2010-December
Science Department) With the support of US Department of Defence Grant	2010
Supervisor: Dr Kendall E. Nygard	
Grant no: FAR0013097, Sponsor: US Department of Defence	
Grant: Designing Robust and Secure Heterogeneous Sensor Network	
Grant Start Date: 7/15/2008, Grant End Date: 7/14/2011	

Professional Membership: IEEE member, member ID 95635186, IEEE Region: R2-Eastern USA.

Grants

diunts		
Internal Grants		
	aduate Student Researcher Summer 2021, funding amount 3,000\$ with	Summer 2021
add	litional 500\$ travel grant.	
	.R.E. Summer Undergraduate Research Experience 2021, funding	Summer 2021
am	ount 2,500\$ with additional 500\$ travel grant.	
External Grants		
3. PI 1	for the US Department of Defense Cyber Security Scholarship or CySP	Spring 2021
Gra	ant for CAE-CDE institutions. East Stroudsburg University students,	
rec	eiving this award, are fully covered for tuition and fees for Fall 2021 and	
Spr	ring 2022. The Grant amount is \$154,056.	
4. PI f	for the CySP Scholarship Grant for CAE CDE institutions. Grant amount	Spring 2020
is \$	5201,627.	
5. Co-	PI for the CySP Scholarship Grant for CAE CDE institutions.	Spring 2019

# **Volunteer in Cyber Security Education Establishment**

Volunteered as instructor for "Crack the Code: Tech Camp for Girls" (uCodeGirl	Summer 2017
Cybersecurity Workshop at Minnesota State University Moorhead)	
Workshop coordinator: Bethlehem Gronneberg ( <u>betty.gronneberg@gmail.com</u> )	
Supervisor: Dr Kendall E. Nygard	
Volunteered as instructor for Native American Summer School Program on	Summer 2016
cybersecurity at North Dakota State University	
Supervisor: Dr Kendall E. Nygard	
Served as a Graduate Student Affiliate, at the Institute for Cyber Security	Fall 2017- Summer
Education and Research at North Dakota State University	2018

## **Student Research Involvement**

Supervised total 7 undergraduate Thesis and two Cyber Security MS thesis students	Fall 2018-Spring
	2021
Student research involvement outcome: 5 conference papers in 2019, 2 in 2020, 16 in 2021	2019-2021

### Served as Reviewer and Program Committee Member

Reviewer for the Journal of Applied Sciences, an open access journal by MDPI, impact factor 2.679.	2021
Reviewer/technical committee member for the 13th International Multi-Conference on Complexity, Informatics, and Cybernetics: IMCIC 2022, March 8 - 11, 2022, Orlando, Florida, USA.	2021
Served on one of the panels reviewing proposals for the NSF program	2021
Reviewer for the Springer journal "Complex & Intelligent Systems" with impact factor 4.927 in 2020 (https://www.springer.com/journal/40747)	2021
Program committee member for DSA 2021, the 8th International Conference on Dependable Systems and their Applications, sponsored by the IEEE Reliability, Yinchuan, China, August 5.	2021
Technical committee member for the 2021 IEEE International Conference on Electro/Information Technology, USA	2021
Technical committee member for the 36th Annual Spring Conference of the Pennsylvania Computer and Information Science Educators (PACISE 2021), USA	2021
Technical committee member for the 4th International Conference on Information and Computer Technologies, Hawaii, USA.	2021
Technical committee member for the 2020 IEEE International Conference on Electro/Information Technology, USA	2020
Technical committee member for the 35th Annual Spring Conference of the Pennsylvania Computer and Information Science Educators (PACISE 2020), USA	2020
Technical committee member for the Journal the IEEE Transactions on Systems, Man and Cybernetics: Systems, USA	2019
Technical committee member for the 31 <sup>st</sup> International Conference on Computer Applications in Industry and Engineering (CAINE 2018), USA	2018

Trust Aware Decision Making

Research Interest: Cyber Security, Collaboration Distance: Paul Erdos (Erdos Number) 3

## Publications

**Journal Papers** 

- 1. M Ahsan, R Gomes, **Md Minhaz Chowdhury**, KE Nygard, "Enhancing Machine Learning Prediction in Cybersecurity Using Dynamic Feature Selector", Journal of Cybersecurity and Privacy 1 (1), 199-218, 2021.
- 2. Kendall E. Nygard, **Md Minhaz Chowdhury**, Ahmed Bugalwi, Pratap Kotala, "People and Intelligent Machines in Decision Making", International Journal of Computers and Their Applications, 2017.

#### **Student Research Papers**

3. Andrew S. Fetter, Md Minhaz Chowdhury, Shadman Latif, "Raspberry Pis for Network Security", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.

- 4. Gianni J. Ruiz, **Md Minhaz Chowdhury**, Shadman Latif, "Comparison of OS Security", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.
- 5. Danny Chen, **Md Minhaz Chowdhury**, Shadman Latif, "Data Breaches in Corporate Setting", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.
- 6. Will Bonasera, **Md Minhaz Chowdhury**, Shadman Latif, "Denial of Service: A Growing Underrated Threat", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.
- 7. Sean Vandervelden, **Md Minhaz Chowdhury**, Shadman Latif, "Managing the Cyber World: Hacker Edition", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.
- 8. Rhiannon Cole, **Md Minhaz Chowdhury**, Shadman Latif, "Dark Web: A Facilitator of Crime", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.
- 9. Samuel Caston, **Md Minhaz Chowdhury**, Shadman Latif, "Risks and Anatomy of Data Breaches", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.
- 10. Montrel D. Morgan, **Md Minhaz Chowdhury**, Shadman Latif, "Protecting Business from Data Breach", Proceedings of the International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 7-8 October 2021, Mauritius.
- 11. Michael Pokrinchak, Shadman Latif, **Md Minhaz Chowdhury**, Distributed Denial of Service: Problems and Solutions, the 2021 IEEE International Conference on Electro Information Technology, May 14 - 15, 2021, Mount Pleasant, MI, USA.
- 12. Derrick Sampson, **Md Minhaz Chowdhury**, The Growing Security Concerns of Cloud Computing, the 2021 IEEE International Conference on Electro Information Technology, May 14 15, 2021, Mount Pleasant, MI, USA.
- 13. Jeremy J. Mayerski, **Md Minhaz Chowdhury**, Measures to Protect Cloud Data, the 2021 IEEE International Conference on Electro Information Technology, May 14 15, 2021, Mount Pleasant, MI, USA.
- 14. Gary Helm, Shadman Latif, **Md Minhaz Chowdhury**, Security Issues of Mobile Devices, the 2021 IEEE International Conference on Electro Information Technology, May 14 15, 2021, Mount Pleasant, MI, USA.
- 15. Mike Mattera, **Md Minhaz Chowdhury**, Social Engineering: The Looming Threat, the 2021 IEEE International Conference on Electro Information Technology, May 14 15, 2021, Mount Pleasant, MI, USA.
- 16. Jeremy Ketterer, **Md Minhaz Chowdhury**, RFID in Security and RFID Security, the 2021 IEEE International Conference on Electro Information Technology, May 14 15, 2021, Mount Pleasant, MI, USA.
- 17. Nikolay Atanassov, **Md Minhaz Chowdhury**, Mobile Device Threat: Malware, the 2021 IEEE International Conference on Electro Information Technology, May 14 15, 2021, Mount Pleasant, MI, USA.
- John A. Khan, Md Minhaz Chowdhury, Security Analysis of 5G Network, the 2021 IEEE International Conference on Electro Information Technology, May 14 - 15, 2021, Mount Pleasant, MI, USA.
- 19. MA Mos, **Md Minhaz Chowdhury**, The Growing Influence of Ransomware, the 2020 IEEE International Conference on Electro Information Technology, July 31 August 1, 2020, Naperville, IL, USA.
- 20. A Mos, **Md Minhaz Chowdhury**, Mobile Security: A Look into Android, the 2020 IEEE International Conference on Electro Information Technology, July 31 August 1, 2020, Naperville, IL, USA.
- 21. Jacob S. Rae, **Md Minhaz Chowdhury**, Mike Jochen, Internet of Things Device Hardening Using Shodan.io and ShoVAT: A Survey, the 18th Annual IEEE International Conference on Electro Information Technology, May 2019, South Dakota, USA.
- 22. Matthew R. Yaswinski, **Md Minhaz Chowdhury**, Mike Jochen, Linux Security: A Survey, the 18th Annual IEEE International Conference on Electro Information Technology, May 2019, South Dakota, USA.
- 23. Jared LaBar, **Md Minhaz Chowdhury**, Mike Jochen, Krishna Kambhampaty, Honeypots: Security by Deceiving Threats, the Midwest Instruction and Computing Symposium 2019, April 2018, Fargo, North Dakota.
- 24. John Hanley, **Md Minhaz Chowdhury**, Mike Jochen, Krishna Kambhampaty, Cloud Security: Challenges, Attacks, and Techniques, the Midwest Instruction and Computing Symposium 2019, April 2018, Fargo, North Dakota.

- 25. Emily Ciaravino, **Md Minhaz Chowdhury**, Mike Jochen, Krishna Kambhampaty, Security Issues of SCADA Systems, the Midwest Instruction and Computing Symposium 2019, April 2018, Fargo, North Dakota.
- 26. Melissa Schneider, Md Minhaz Chowdhury, Mobile Devices Vulnerabilities, the 37th International Conference on Computers and their Applications, March 21-23, 2022, Virtual, MT, United States.
- 27. Logan Smith, Md Minhaz Chowdhury, Ethical Hacking: Skills to Fight Cybersecurity Threats, the 37th International Conference on Computers and their Applications, March 21-23, 2022, Virtual, MT, United States.

**Conference** Papers

- 28. Krishna Kambhampaty, Maryam A Maryam Alruwaythi, **Md Minhaz Chowdhury**, Kendall E. Nygard, Trust and its Influence on Technology, the Midwest Instruction and Computing Symposium 2019, April 2018, Fargo, North Dakota.
- 29. Krishna Kambhampaty, Maryam A Maryam Alruwaythi, **Md Minhaz Chowdhury**, Kendall E. Nygard, Identifying Malicious Users Through Behaviour, Midwest Instruction and Computing Symposium 2019, April 2018, Fargo, North Dakota.
- 30. Kendall E. Nygard, **Md Minhaz Chowdhury**, K Kambhampaty, Pratap Kotala, Cybersecurity Materials for K-12 Education, Midwest Instruction and Computing Symposium 2018, April 2018, Duluth, Minnesota.
- 31. Md Minhaz Chowdhury, Kendall Nygard, "Machine Learning within a Con Resistant Trust Model", The 33<sup>rd</sup> International Conference on Computers and Their Applications (CATA 2018), March 19-21, 2018, Flamingo Hotel, Las Vegas, Nevada, USA.
- 32. Feng Chang, K. Kambhampaty, **Md Minhaz Chowdhury**, Kendall Nygard, "Using Twitter to Determine GMO Perception Differences Between Countries", The 33<sup>rd</sup> International Conference on Computers and Their Applications (CATA 2018), March 19-21, 2018, Flamingo Hotel, Las Vegas, Nevada, USA.
- 33. **Md Minhaz Chowdhury**, Kendall E. Nygard, Krishna Kambhampaty, Maryam Alruwaythi, "Deception in Cyberspace: Performance Focused Con Resistant Trust Algorithm", the 4<sup>th</sup> Annual Conference on Computational Science & Computational Intelligence, December 2017, Las Vegas, Nevada, USA.
- 34. **Md Minhaz Chowdhury**, Kendall E. Nygard, "An Empirical Study on Con Resistant Trust Algorithm for Cyberspace", The 2017 World Congress in Computer Science, Computer Engineering, & Applied Computing, 2017, Las Vegas, Nevada, USA.
- 35. **Md Minhaz Chowdhury**, Kendall E. Nygard, "Deception in Cyberspace: An Empirical Study on a Con Man Attack", the 16<sup>th</sup> Annual IEEE International Conference on Electro Information Technology, May 2017, Lincoln, Nebraska, USA.
- 36. Kendall E. Nygard, Md. Minhaz Chowdhury, Pratap Kotala, "Trust and Purpose in Computing", The 32<sup>nd</sup> International Conference on Computers and Their Applications, March 2017, Honolulu, Hawaii, USA.
- 37. Md Khan, **Md Minhaz Chowdhury**, Kendall E. Nygard, "Electricity Price Forecasting in a Smart Grid", The 9<sup>th</sup> International Conference on Future Computational Technologies and Applications, February 2017, Athens, Greece.
- 38. Pranav Dass, Yang Lu, Md. Minhaz Chowdhury, Damian Lampl, Janani Kamalanathan, Kendall E. Nygard, "Gender Differences in Perceptions of Genetically Modified Foods", The 31<sup>st</sup> International Conference on Computers and Their Applications, April 2016, Las Vegas, Nevada, USA.
- 39. Pranav Das, **Md Minhaz Chowdhury**, Damian Lampl, Kendall E. Nygard, "Risk Perceptions for Genetically Modified Organisms: An Empirical Investigation", the Software Engineering and Applications 2015, Marina Del Rey, CA.
- 40. Sowjanya Param, **Md Minhaz Chowdhury**, Damian Lampl, Pranav Dass, Kendall E. Nygard, "Energy Demand Prediction Using Neural Networks", The 28<sup>th</sup> International Conference on Computer Applications in Industry and Engineering, October 2015, San Diego, California, USA.
- Damian Lampl, Md Minhaz Chowdhury, Pranav Dass, Kendall E. Nygard, Vahid Khiabani, "Optimization Modelling in a Smart Grid", The 15<sup>th</sup> International Conference on Wireless Networks, 2015, Athens, Greece.
- 42. **Md Minhaz Chowdhury**, Jingpeng Tang, Kendall E. Nygard, "An Artificial Immune System Heuristic in a Smart Grid", the 28<sup>th</sup> International Conference on Computers and Their Applications, 2013, Honolulu, Hawaii, USA.
- 43. Kendall E. Nygard, Steve Bou Ghosn, Md Minhaz Chowdhury, Ryan McCulloch, Davin Loegering, Anand Panday, Md. Khan, Prakash Ranganathan, "Decision Support Independence in a Smart Grid", The 2<sup>nd</sup> International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies, March 2012, Saint Maarten, Netherlands Antilles.

- 44. Kendall E. Nygard, Steve Bou Ghosn, Davin Loegering, **Md Minhaz Chowdhury**, Ryan McCulloch, Mohammad Khan, Anand Panday, Prakash Ranganathan, "Implementing a Flexible Simulation of a Self-Healing Smart Grid", The 2011 International Conference on Modelling, Simulation and Visualization Methods, July 2011, Las Vegas, USA.
- 45. Kendall E. Nygard, Steve Bou Ghosn, **Md Minhaz Chowdhury**, Davin Loegering, Ryan McCulloch, Prakash Ranganathan, "Optimization Models for Energy Reallocation in a Smart Grid", The IEEE Conference on Computer Communications Workshops, April 2011, Shanghai, China.

# Awards

Received Vice-Chancellor's Gold Medal at Daffodil International University from the President of the People's Republic of Bangladesh in 2008.