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Shihab Ahmed

PHD STUDENT AT TOWSON UNIVERSITY

RESEARCH INTERESTS

System Security, Malware Analysis, Cyber Threat Intelligence, AI in Cybersecurity

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EDUCATIONAL QUALIFICATION

Towson University, Towson, MD, USA
PhD, Information Technology   *Aug '24 - Dec '28 (Expected)*

Comilla University (CoU), Cumilla, Bangladesh
Master of Science, Information and Communication Technology   *Nov '21 - Sep '22*
CGPA: 3.75/4.00

Comilla University (CoU), Cumilla, Bangladesh
Bachelor of Science, Information and Communication Technology   *Feb '16 - Mar '21*
CGPA: 3.79/4.00

WORK EXPERIENCE

Graduate Research Assistant, Towson University
Supervisor: Dr. Md Sajidul Islam Sajid   *Aug '24 - Present*

- Research Focus: System Security, Malware Analysis, GenAI for Cyber Deception Orchestration
- Utilizing Generative AI models and prompt engineering to automate the creation of cyber deception ploys.

Research Assistant, Advanced Machine Intelligence Research (AMIR) Lab
Supervisor: Dr. Mohammad Firoz Mridha   *Aug '23 - Jul '24*

- Utilized NLP techniques to develop and implement aspect-based sentiment analysis models for the Bengali language.

Graduate Research Assistant, Comilla University (CoU)
Supervisor: Dr. Dulal Chakraborty   *Jan '22 - Sep '22*

- Thesis Title: "Implementation and Performance Evaluation of Proactive and Reactive Routing Protocols with Intrusion Detection in MANET"

Software Engineer at GridFlow Pro (Remote)
Backend Developer (Django)   *Jun '21 - Nov '21*

- Designed APIs using the Django REST Framework.
- Worked with cross-functional teams to communicate project requirements and proposals.
- Worked with Git, and Gitlab for version control.
- Deployed web applications on the Ubuntu server.

PUBLICATIONS

tRF-BERT: A Transformative Approach to Aspect-Based Sentiment Analysis in the Bengali Language
Supervisor: Dr. Mohammad Firoz Mridha

Authors: **Shihab Ahmed**, Moythry Manir Samia, Maksuda Haider Sayma, Md Mohsin Kabir, and M. F. Mridha
PLOS ONE Journal, 2024. Manuscript Link

PROJECTS	**COVID-19 Detection and Prediction Using Chest X-Ray Images**
	Supervisor: Md. Imran Hossain *Dec '20 - Mar '21*

PROJECTS

COVID-19 Detection and Prediction Using Chest X-Ray Images
Supervisor: Md. Imran Hossain   *Dec '20 - Mar '21*

- Applied deep learning techniques to develop a robust COVID-19 detection system.
- Stack: Python, Tensorflow. GitHub Link

GaanGhor
Supervisor: Md. Rakib Hasan   *Oct '19 - Feb '20*

- Developed an online library management system.
- Stack: HTML, CSS, Bootstrap, PHP, JavaScript. GitHub Link

ClassOrganizer
Supervisor: Md. Rakib Hasan   *May '19 - Aug '19*

- Designed and developed a mobile application for Android to streamline class scheduling for teachers and students in the ICT department.
- Stack: Android Studio, Java. GitHub Link

TECHNICAL SKILLS

Programming Languages: Python, C, C++, Java, Latex, familiar with Matlab and PHP
Framework: Tensorflow, Keras, Django Rest
Database Management System: SQL, PostgreSQL, MySQL
Development Tools: GitHub, NetBeans, Visual Studio Code, Android Studio
Network Simulation Tools: OPNET Modeler, Cisco Packet Tracer
Front End: HTML, CSS, Bootstrap, familiar with JavaScript
Video Editing Software: Camtasia Studio 8

EXTRA-CURRICULAR ACTIVITIES

- Teacher, ICT Department, at AR Science Academy, a center for students from various schools. (2 years: 2018-2020)
- General Secretary at Comilla University IT Society (CoUITS) (Apr '19 - Jun '20)
- Executive Committee Member at Radio CoU (Aug '17 - Aug '19)
- Active Citizen at British Council (Nov '16 - Dec '16)

CERTIFICATES

- Python (Basic) Certificate (HackerRank)
- Problem Solving (Basic) (HackerRank)
- Python for Everybody Specialization (Coursera)
- SQL (Intermediate) Certificate (HackerRank)
- SQL (Basic) Certificate (HackerRank)

AWARDS & ACHIEVEMENTS

Awarded **National Science and Technology Fellowship (2022-2023)**

Awarded **Dhaka Board JSC Scholarship** in 2010