Md Olid Hasan Bhuiyan

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[CV Last Updated: 08 May, 2025]

Research Interest

- Security and Privacy, Computer Vision, Computer Networks

Education

- PhD in Cybersecurity, University of California, Riverside

PhD Supervisor – Prof. Emiliano De Cristofaro

September 2024 - Present

- BSc in Computer Science and Engineering, Bangladesh University of Engineering and Technology

Undergraduate Thesis Topic: Cloud Security

March 2018 - May 2023

Employment

- March 2025 Present
 - Teaching Assistant and Graduate Student Researcher, University of California, Riverside (UCR)
- April 2024 September 2024
 - o Site Reliability Engineer, Relisource Software Ltd.
- June 2023 March 2024
 - o Programmer, Grameen Bank IT Department

Honors & Awards

- **Professional Member**, Association for Computing Machinery (ACM), ID: 9085533

May 2025

- **2nd Place**, in Graduate Division at <u>UCR Programming Contest</u>, with 628 points among 222 participants

 October 2024
- Dean's Distinguished Award, University of California, Riverside

Sep 2024 – March 2025

- **Conference Speaker**, 14th International Conference on Cloud Computing and Services Science

 May 2024
- **RISE Research Grant**, Research and Innovation Center for Science and Engineering, BUET February 2023
- **Four times** Regional Physics Olympiad and **One-time** National Physics Olympiad Winner 2014 2017

Publications

- **Md Olid Hasan Bhuiyan**, Souvik Das, Shafayat Hossain Majumder, Suryadipta Majumdar, Md. Shohrab Hossain

On Detecting Malicious Code Injection By Monitoring Multi-level Container Activities

14th International Conference on Cloud Computing and Services Science

- Towhidul Islam, Md Mehedi Hasan Rigan, **Md Olid Hasan Bhuiyan,** Tanzima Hashem, Md Mahbubur Rahman

H2OPulse: Smartphone-Assisted Vein Evaluation for Early Recognition of Dehydration

Accepted at IMWUT November 2024

Research Experience

- **Final Year Thesis Work**, Bangladesh University of Engineering and Technology. Thesis Topic: Security in Cloud Environment
- Vein-Based Imaging Approach for Real-Time Dehydration Detection, Bangladesh University of Engineering and Technology engaged in a research work with Professor Dr. Tanzima Hashem from Department of CSE, BUET. In this research, we are trying to detect dehydration from hand vein image using different deep learning models.
- **Privacy Auditing in Vertical Federated Learning,** University of California, Riverside

Technical Skills

- **Programming Languages:** Assembly, C, C++, C#, Java, Python, CUDA
- **Documentation and Presentation Tools:** Latex, MS Office Suite
- **Software Development Framework:** Node.js, React.js, Django, Javafx, .NET
- **DBMS Tools:** Oracle, PostgreSQL
- **Network Simulation Tool:** NS3
- Computer Forensic Tools: Strace, Sysdig, Wireshark, New Relic
- Others: Kubernetes, Docker Container, git, Machine Learning/Deep Learning

Projects

- StackOverflow Search Engine (01/2025 03/2025)
 - This project is an AI-powered search engine designed to help developers quickly find solutions to programming errors by leveraging Stack Overflow data. The system combines keyword-based search (using Lucene) and semantic search (using BERT) to retrieve relevant answers, and it employs a Large Language Model (LLM) to generate concise and accurate solutions.
 - o Full Code is available at Sizvy/CS242 Project
- Bangla Caption Generation for images (02/2023 03/2023)
 - o In this project, a new model is proposed and implemented that can generate Bangla caption for a given image
 - o Full Code is available at https://github.com/Sizvy/Bangla-Caption-Generator-for-images.git
- Bangla Digit Recognition using CNN (01/2023 02/2023)
 - o This CNN model is built from scratch. The applied model showed 77% independent test accuracy and 91% validation accuracy.
 - o Full Code is available at https://github.com/Sizvy/Bangla-Digit-Recognition.git
- Englishour (08/2022 10/2022)
 - This is a software development project. Purpose of this project is to create an English Learning Platform for children.
 - o Full Code is available at
 - Frontend: https://github.com/swapped004/englishour-FE.git
 - **Backend:** https://github.com/tawsifshahriar7/englishour-backend.git
- TCP Libra (11/21 02/22)
 - This is a congestion control algorithm implemented successfully in NS₃.
 - o Full Code is available at https://github.com/Sizvy/Tcp-LIbra.git