Md Olid Hasan Bhuiyan

PhD student, Department of
Computer Science, University of
California, Riverside.

Homepage: olidhasanbhuiyan
Email: mbhui008@ucr.edu,
sizvy06@gmail.com
LinkedIn: OlidHasan
Google Scholar: FqGRNsAAAAAJ

[CV Last Updated: 05 February, 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
- **September 2024 – Present**
  - PhD Student, University of California, Riverside (UCR)
- **April 2024 – September 2024**
  - Site Reliability Engineer, Relisource Software Ltd.
- **June 2023 – March 2024**
  - Programmer, Grameen Bank IT Department

Honors & Awards
- **2nd Place,** in Graduate Division at UCR Programming Contest, with 628 points among 222 participants   *October 2024*
- **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.

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

Undergraduate Projects

- **StackOverflow Search Engine (01/2025 – 03/2025)**
  o 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)**
  o 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)**
  o This is a congestion control algorithm implemented successfully in NS3.
  o Full Code is available at https://github.com/Sizvy/Tcp-LIbra.git