## **Research Interest**

* Security and Privacy
* Computer Vision
* Computer Networks

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

**Md Olid Hasan Bhuiyan**

## **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](https://ucrpc.cs.ucr.edu/F24/), 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

**[CV Last Updated: 05 February, 2025]**

## **Education**

* PhD in **Cybersecurity**, University of California, Riverside PhD Supervisor – [Prof. Emiliano De Cristofaro](https://emilianodc.com/) *September 2024 - Present*
* BSc in Computer Science and Engineering, Bangladesh University of Engineering and Technology **Undergraduate Thesis Topic:** Cloud Security *March 2018 – May 2023*

## **Undergraduate 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.
  + Full Code is available at [Sizvy/CS242\_Project](https://github.com/Sizvy/CS242_Project)
* **Bangla Caption Generation for images (02/2023 – 03/2023)**
  + In this project, a new model is proposed and implemented that can generate Bangla caption for a given image
  + Full Code is available at <https://github.com/Sizvy/Bangla-Caption-Generator-for-images.git>
* **Bangla Digit Recognition using CNN (01/2023 – 02/2023)**
  + This CNN model is built from scratch. The applied model showed 77% independent test accuracy and 91% validation accuracy.
  + 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.
  + 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.
  + Full Code is available at https://github.com/Sizvy/Tcp-LIbra.git

## **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