EHSAN UL HAQUE

Software Engineer
Security & Privacy
Researcher

Contact

+1(860)208-7517

ehsan.ul_haque@uconn.edu

Storrs, CT

ehsanulhaque.com

ehsan-ashik

in/ehsan-ul-haque

About Me

PhD candidate with experience in research, software engineering, and mentorship. Proficient in designing scalable server-side and database architectures, with expertise in Agile methodologies, full-stack development, and statistical data analysis.

Skills

Languages	C#, Java, Python, C/C++
Frameworks	.NET, Next.js
Databases	SQL, MySQL, MongoDB
Versioning	Git, TFS
CI/CD	TeamCity, GH Actions, Docker
Project Repo	GitHub, Bitbucket
ORM	Entity Framework
Agile Tools	Jira, Teamwork
Data Analyses	R, SPSS
HCI Tools	Qualtrics, MTurk, Prolific
Others	NUnit, NLog, Log4NET

Achievements

Predoctoral Prize for Research Excellence
University of Connecticut **2023 - 2024**
Awarded to the outstanding PhD researchers (2 times).

Best Paper Award
ACM CHI Conference **2023**
The award was given to 35 papers from the 879 accepted papers across 3182 complete submissions: ~1% of total submissions.

Synchrony Cybersecurity Graduate Fellowship
University of Connecticut **2022**
Awarded to the promising cybersecurity researchers.

Experience

University of Connecticut, Storrs, CT

Graduate Research/Teaching Assistant **08/2019 - present**

- Conducted robust statistical analysis using Python, R, and SPSS to ensure data driven findings, contributing to inform novel findings through publications in usable security & privacy.
- Developed MTurk API helpers using C# and .NET, increasing efficiency and reducing time requirement by automating advanced user-studies on MTurk.
- Wrote a Docker Image to efficiently run OS161 on top of Ubuntu 22.04, mitigating the platform-related dependencies while assisting students to quickly setup OS161 environment locally.

Enosis Solutions, Dhaka, Bangladesh

Senior Software Engineer **07/2017 - 07/2019**

- Designed and maintained large-scale relational database architectures in MS SQL Server, helped optimizing query efficiency, bringing down latency in high-demand applications.
- Contributed to designing full-stack architectures using C#, .NET MVC. Integrated and managed CI/CD pipelines in development and production environments.
- Mentored 4 newly hired talents by offering technical training, code reviews, and guidance on best practices (SOLID principles), helped efficiently contributing to team environments.

Software Engineer **03/2016 - 06/2017**

- Developed scalable REST API services using C# and .NET, streamlining integration with front-end components.
- Implemented Data Access Layers using Entity Framework, blending business requirements with efficient data accesses.
- Developed a tool to effectively create offline versions of live web-applications using Shell scripting, enabling availability in low/no Internet scenarios.

Education

PhD in Computer Science and Engineering
University of Connecticut **02/2025 (expected)**
CGPA: 4.0 / 4.0
Research areas: Usable Security & Privacy, Human-Computer Interaction, AI in Security & Privacy

BS in Computer Science and Engineering
Bangladesh University of Engineering and Technology **03/2016**

Projects

Amazon MTurk API Helpers **C#, .NET, AWS SDK**
Curated list of helper functions with ability to perform advanced Requester tasks programmatically on Amazon Mechanical Turk crowdsourcing platform.

Tic-Tac-Toe Game **C#, Unity 2D**
Recreated the iconic Tic-Tac-Toe game, an engaging player experience against a sophisticated AI opponent. The AI opponent leverages the Minmax with Alpha-beta pruning to evaluate optimal moves for player's strategy.

Amazon Scraping and Parsing Toolkit **Python, Poetry, BS4**
Python application to scrape and parse amazon product reviews with diverse filtering and keyword searching capabilities.

15 Puzzle Game **Java swing, Docker, AWS**
A java swing rendition of the 15 puzzle game. For web compatibility, the app was ported on Webswing, Dockerized container is deployed on an AWS EC2 instance.

Smart-on-FHIR Client Portal **Vue.js, Node.js, Docker**
The web portal implements client-level access token-based Authentication mechanism with EHR vendor (Logica Sandbox) and integrates FHIR specs for Practitioner, Patent, and Patient Observations.