Sudipa Saha

riyasudipasaha@gmail.com | LinkedIn | Google Scholar | sudipa14.github.io

EDUCATION

Bangladesh University of Engineering and Technology   February 2017 - May 2022
Bachelor of Science in Computer Science and Engineering
Department of Computer Science and Engineering   CGPA: 3.56/4.00

RESEARCH EXPERIENCE

Analyzing Impacts on Physiological Aspects of Rickshaw Pullers due to Heat Exposure   2020 - 2023
- Supervisor: A. B. M. Alim Al Islam
- Collaborators: Dr. Tauhidur Rahman
- Objective: Reflecting on the impacts of environmental exposure upon human physiology, psychology, etc. within diversified communities such as rickshaw pullers who are always subjected to harsh environmental conditions with little to no measures taken against these harsh conditions. (Link)

Interaction Based Credibility Analysis of Facebook News   2021 - 2022
- Supervisor: Dr. Sadia Sharmin
- Objective: Developed a method of detecting fake news using interaction metrics on Facebook. The proposed method outperforms existing content-based and NLP-based solutions and is also language independent.(Link)

ACCEPTED PAPERS & POSTERS

- Sadia Sharmin, **Sudipa Saha**, Tasin Hoque, Khandaker Abrar Nadib - **Interaction Based Credibility Analysis of News on Facebook Using Machine Learning Methodologies.***16th International Conference on Signal Image Technology & Internet based Systems(2022)*
- **Analyzing Impacts on Physiological Aspects of Rickshaw Pullers due to Heat Exposure.***11th International Conference on Networking, Systems and Security(2024)*

EXPERIENCE

Senior Software Engineer | Enosis Solutions, Bangladesh   May 2024 - Present
- Working on developing a centralized solution for data conversion within an existing application.
- **TechStack** : .Net Core, SQL Server, PostgreSQL, MySQL, Virtual Machine

Software Engineer | Enosis Solutions, Bangladesh   May 2022 - April 2024
- Contributed to developing a web application that displays customer data and generates reports through an interactive dashboard.
- **TechStack** : Angular, .Net Core, SQL Server, Redis

LAB PROJECTS

- **Heuristic Analysis of bKash** | Link
  Conducted a heuristic analysis of the mobile financial app bKash to identify existing usability issues and proposed solutions to resolve them.
- **Ping of Death and Ping Flood attack** | Link
  Spoofed ICMP echo requests with an arbitrary IP address to overwhelm the victim and make it unresponsive in a Ping Flood attack and oversized ping packets were sent to the victim for a Ping of Death attack.
- **Cross Site Scripting Attack** | Link
  Techstack: JavaScript, Elgg in Ubuntu VM Image
  Designed a self-propagating worm with a malicious JavaScript program that forges HTTP requests directly from the victim's browser to make the attacker a friend, modify the victim's profile, posting on behalf of the victim.

- **Distracted Driver Action Classification** | Link
  Techstack: CNN, ResNet, VGG16, Xception, MobileNet
  Constructed a DL model using CNN and transfer learning methods for classifying distracted driver activity.
- **Learn Math** | Link
  Techstack: React.js, Node.js, PostgreSQL
  Developed a math learning platform where students can practice, watch tutorials and give quizzes. Instructors create Rubric-based written questions and tutorials and moderators check the quality of content.
- **Dino Run** | Demo video | Link
  Instruments: ATMEGA-32, Led Matrix, Joystick, Sound Sensor
  This microcontroller project replicates the features of Google Chrome's popular Dinosaur game.
- **Trip Advisor** | Link
  Techstack: PHP, HTML, CSS, PostgreSQL
  Developed a platform where users can search for hotels, book hotels, see a list of nearby places to see and provide hotel ratings.

SKILLS

Languages	Java, C, C++, C#, Python, Matlab, Shell, JavaScript
Database	Oracle, MySQL, PostgreSQL, SQL Server
Version Control	Git(GitHub, Bitbucket), GitLab, Azure, Jira
Frameworks	React, Node, Angular, Ionic
Web Technology	HTML, CSS, Rest API

EXTRA-CURRICULAR ACTIVITIES

- **Bangladesh Mathematical Olympiad** 2019 - 2021
  - Academic Team Member
- **BUET System Analysis, Design and Development community(BSADD)** 2020 - 2022
  - Volunteer
- **Bangladeshi Women in Computer Science and Engineering(BWCSE)** 2020 - 2021
  - Coordinator

ACHIEVEMENTS

- **5th** in Ada Lovelace Datathon, 2021
- **Finalist**, Pioneros 2.0 (2018)
- **Regional Champion**, Bangladesh Mathematical Olympiad (2014-2016)

REFERENCE

Dr. Sadia Sharmin
Associate Professor
Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology, Dhaka
Email: sadiasharmin@cse.buet.ac.bd