# **Rubaiyad Noor Shahriar**

### **Synopsis**

I am eager about delving into research that tackles intricate challenges. My passion for exploration and creativity fuels my desire to find avenues where I can make substantial contributions and evolve as a **researcher** in dynamic fields. Looking forward to exploring various research options.

### **Academic Profile**

#### **Bachelors in Computer Science Engineering**

American International University Bangladesh (AIUB)

- **Grade:** 3.95 out of 4.00
- Major: Information Systems (Thesis Domain: Human-Computer Interaction)
- Second Major: Computational Theory (Machine Learning, Data mining & Data Warehouse)
- Minor: Software Engineering
- Worked as a Teaching Assistant (TA) for 3 months and unofficial Research Assistant (RA) for 1 year

### **Research Work & Contributions**

## Elevating Software and Web Interaction to New Heights: Applying Formal HCI Principles for Maximum Usability (Undergraduate Thesis)

Index Terms: Usabilty, User Interface, User Experience, UI laws, Usability Testing

- Main focus of this **thesis** is to **improve usability and user reactivity** applying Human Computer Interaction principles. By identifying and applying the most essential HCI laws and principles, usability components can be effectively improved.
- Redefined the usability honeycomb and proposed a set of compressed laws that will optimize the usability and user reactivity of the system at it's maximum.

### A Machine Learning Application to Extricate the Red Wine Quality (Preprint)

Index terms: Classification, Supervised Learning, Random Forest, K-Nearest Neighbor(K-NN), Naïve Bayes, Decision tree, Support Vector Machine

 Used Naïve Bayes, K-Nearest Neighbor, Support Vector Machine, Random Forest, and Decision tree algorithms to classify the Red Wine Quality dataset and provided a comparative discussion on the most efficient result.

#### Predominance of C4.5 Algorithm in the field of Data Mining (Research Methodologies)

Index Terms: Classification, C4.5, K-Means Algorithm, Support Vector Machine

• Objective of this **research** is to **theoretically** prove C4.5 algorithm is the most **optimized** algorithm among C4.5, K-Means and SVM, to conduct general data mining tasks.

### Microprocessor-based Water Quality Monitoring System for Bangladesh (Preprint)

Index terms: Water Quality Index (WQI), Arduino, pHsensor

 Objective of this project is to develop prototype equipment to measure water safety levels depending on the chemical measurements and pH levels.

### August 2021

### **Language & Frameworks**

Python (Library: NumPy, Pandas, Scikit-learn, Matplotlib, Pytorch - Tools: TensorFlow, Jupyter Notebook, Weka), VueJS (Vue 2,3), ASP.NET Core, NopCommerce (4.60.4) — Contributed to different fundamental projects | Integrating complex functionalities with proper security verifications and testing

**MySQL, Oracle SQL (10g, 11g, 19c), Firebase, Git (Git flow), Tortoise Git** — Have proper training on version control systems at a professional level | Experienced with Tortoise Git and Git Flow | Created and Implemented multiple complex database functionalities & features

January 2019 - May 2023

February 2023

October 2022

May 2021

### Professional Experience & Roles

#### Team Lead & Manager (Contract)

Cloud Vortex Innovation

- Acquired proficiency in **DevOps** methodologies, enabling seamless coordination between teams and stakeholders.
- Implemented Waterfall, Agile and Scrum approaches, ensuring effective project management and documentation, meeting diverse project requirements.
- Implemented strategic initiatives to meet organizational objectives and drive continuous improvement.
- Led and managed team to achieve project goals through effective coordination and communication.

#### **Software Engineer (Full-Time)**

Shapla Infosys

- Worked on CRM (Nop-Commerce 4.60.4) with team
- Developed **front-end** plug-ins (Homepage, Slider, Navigations, Banner)
- Originated back-end functionalities (Filtering systems, built-in PDF Generator(QuestPDF), Slider)
- Designed UI/UX Concept based websites (Designs, Custom modules, PSD, Practice Websites, Duplication of E-Learning websites)
- Conserved code-base using version control (Git)
- Completed multiple certification courses from Udemy, provided by the company
- Collaborated with cross-functional teams to gather requirements and deliver high-quality software solutions

#### Teaching Assistant (TA)

American International University Bangladesh

- Supported university courses as a Teaching Assistant, aiding in classroom activities, grading, and student assistance.
- Provided personalized support through office hours, fostering academic success and collaboration among students.
- · Learned about Project management, Discipline, Time management, different types of teaching approaches, and Industrial best practices

## **Key Projects & Contributions**

### SajekGor (Team Project)

A fully Nop Commerce (4.60.4) based E- commerce shopping site (Multivendor)

• Framework: ASP.NET Core, Nop Commerce (4.60.4)

- Technologies worked on: Bootstrap 5, JQuery functionalities, QuestPDF, Swiper Slider
  - Mostly worked on the View and responsivness taskes of this projects using Razor, CSS3, JOuery transactions
  - Worked on minimal backend tasks (ex. Adding home page banner, sliders using properties, Slider functionalities, PDF Profiler tasks, Product filtering functionality)

### Wine Quality & Accuracy Measurement (Classification Model)

Designed to measure accuracy of different attributes of three types of wines

- **Tools:** Weka, Jupyter Notebook
- Libraries: NumPy, Pandas, Matplotlib
- Algorithms: K-NN, SVM, Random Forest

### **Scholarly Contributions**

Keywords: MIS, Industry 4.0, Automation, 4th Industrial Revolution

- Discussed about:
  - Information systems' role
  - Essential characteristics
  - Things that drive automation

February 2024 – present

May 2022 - August 2022

March 2023 - January 2024

October 2023

August 2022

May 2022

### Role of MIS in the Fourth Industrial Revolution (4IR)

### **Certifications**

Professional Programming With C# — Dev Skill | Rank: 2nd (Achieved 82.02%), Agile Project Management — Google (Coursera), Programming with Python 3.X — Simplifearn, Introduction to Jupyter — 365 DataScience, Introduction to Databases (MySQL) — Meta (Coursera), Data Analytics and Visualization Virtual Experience — Accenture, Introduction to Al in Data Center — Nvidia (Coursera), Introduction to Git and GitHub — Google (Coursera)

### **Awards & Academic Recognition**

Merit List – Scholarship March 2019

American International University Bangladesh (AIUB)

Academic Excellence Award January 2015

The Institution Of Engineers (IEB), Bangladesh

### **Professional Trainings**

Professional Programming with C#

February 2023

Devskill

- Technological Proficiencies -
  - C#, ASP.NET Core MVC Web Development using C#11 .NET 7, Entity Framework, ADO.NET, MVC Architecture,
  - Fluent API, REST API, ORM, Gitflow, SSH, Docker, Postman, Node Package Manager (npm), NuGet, Web API
  - Clean Code Architectures
  - Unit Testing

### **Extracurricular Activities**

### **AIUB Community of Engineering Students (ACES)**

April 2021 - March 2023

General member

• Coordinate technical workshops, community outreach initiatives, and networking events to enhance members' skills, community impact, and professional connections

### Association of Computing Machinery (ACM)

March 2021 - March 2023

General Member

• Maintain a vibrant online community through social media engagement, newsletters, and discussion forums to keep members informed, connected, and engaged

### References

**Md Mohibor Rahman Rahat**, *IT Executive*, Shapla Infosys mohibor@shaplainfosys.com, +8801760761659