# DABIR HASAN RIZVI

Software Developer
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Links - Portfolio, LinkedIn, GitHub

# **PROFESSIONAL SUMMARY**

Result-driven Software Developer with strong academic credentials and over a year of experience working in agile teams to develop web-based applications. Proficient in object-oriented programming with a strong research interest in computer vision. Technologically savvy and with a drive to excel, I am eager to contribute effectively to the organisation's success.

# **WORK EXPERIENCE**

## Junior Web Developer, Net World Sports, Wrexham

07/2022 - 06/2023

- Built responsive and reusable Vue.js front-end components, optimising performance within a micro-service architecture.
- Enhanced user experience for the company's blog website, collaborated with content and SEO teams to implement responsive design.
- Streamlined workflows across departments by creating a Chrome extension, integrating APIs to address pain points and increase productivity.
- Employed agile methodology to migrate 40+ e-commerce stores from Magento 1 to Magento 2, improving website performance and customer experience.
- Tools and Technologies used: JavaScript, Gulp, PHP, jQuery, Laravel, PostgreSQL, Vue.Js, Magento 2, WordPress, Rest API, HTML, CSS, Sass, Bootstrap.

## Java Programmer (Internship), Racks & Rollers | Storage Technologies & Automation, Bengaluru

01/2020 - 07/2020

- Developed a scalable Pick-to-light system GUI, aligning with technical standards.
- Engaged in the complete software development life cycle, encompassing performance analysis, design, development, and testing, to deliver an optimal user experience and ideal functionality.
- Leveraged Scrum and Test-Driven Development (TDD) to streamline the development process and ensure high-quality software delivery.

## **EDUCATION**

#### MSc. Advanced Computer Science (with Integrated Year in Industry), Aberystwyth University

09/2021 - 12/2023

• **Relevant Modules:** Machine Learning for Intelligent Systems, Modelling Managing and Securing Data, Statistical Concepts Methods and Tools, Agile Software Development Project.

#### Bachelor of Engineering in Electronics and Communication Engineering, CMR Institute of Technology

08/2016 - 08/2020

• **Relevant Modules:** Programming in C and Data Structures, Python Application Programming, Operating Systems, Network and Cyber Security, Programming in Java.

# SKILLS

Programming Languages: JavaScript, TypeScript, jQuery, Java, Python, C, C++, C#, R, PHP, HTML, CSS

Frameworks and Databases: Vue.Js, Node.js, Laravel, WordPress, Firebase, Magento 2, Bootstrap, PostgreSQL.

**DevOps and Methodologies:** Git, Docker, Jira, Agile, Google Cloud Platform.

Machine Learning and Neural Network: Regression, LSTM, TensorFlow, Random Forest, SVM, ANN, CNN, RNN.

**Computer Vision:** Image Processing, OCR, Object Detection, Image Classification.

**Data Science:** Data Analysis, Feature Engineering, Statistical Modeling, Predictive Modeling. **Soft Skills:** Communication, Adaptability, Problem-solving, Teamwork, Time Management.

# **CERTIFICATION COURSES**

Introduction to DevOps, IBM

Vue- The Complete Guide (inc. Router & Composition API), Udemy

**Machine Learning, Stanford Online** 

Deep Learning Specialization, DeepLearning.AI

Introduction to C# Programming and Unity, University of Colorado

Game Design and Development Specialization, Michigan State University

# **PERSONAL PROJECTS**

## **Robot Movement Automation with Computer Vision.**

 Developed a Robot Movement Automation System using Computer Vision and Digital Image Processing, featuring SIFT algorithm implementation via OpenCV, Unity 3D integration with Vuforia SDK for AR-like feature detection, and Arduino IDE for motor control, enabling efficient object tracking and following target within a Wi-Fi network range.

## Prediction of Parking areas availability from parking dataset using AI/ML Models.

- Implemented AI/ML techniques for parking availability prediction using Santander's on-street sensor data.
- Applied LSTM and Random Forest models to assist drivers in Santander by forecasting parking availability for the upcoming hour and enhancing urban mobility through data-driven insights.

## Prediction of likelihood of Blood-Brain Barrier (BBB) penetration for a chemical compound.

- Secured 1st place in Aberystwyth University's Kaggle challenge with an accuracy of 90.603%, utilising an SVM model.
- Showcased expertise in feature extraction, model training and precision measurement using the AUC metric.

## Detecting cardiac arrhythmia using single lead ECG recordings.

- Achieved an accuracy of 82.947% in a Kaggle challenge, emphasising cardiac arrhythmia classification using the PhysioNet Computing in Cardiology Challenge 2017 dataset.
- Employed random forest and CNN for pattern detection.

## Speech Recognition.

- Designed a MATLAB based speaker recognition system using Fast Fourier Transform for feature extraction. Aims
  to identify speaker based on speech wave characteristics such as pitch.
- Demonstrating practical applications of signal processing and pattern recognition.

## **AR Solar System**

- Engineered an Android application by seamlessly merging Android Studio and Unity 3D, enhanced with Augmented Reality (AR) using Vuforia.
- Provided the ability to the users to scan a predefined image, activating camera permissions to reveal an AR solar system.