Taiabur Rahman

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OBJECTIVE

I am looking for a master's thesis position with the goal of improving medical diagnostic systems through creative research in medical imaging esteemed lab.

EDUCATIONS

MSc, ERASMUS+ Joint MSc in Medical Imaging & Applications (MAIA)

Sep 2022 -Aug 2024

University of Burgundy-France, University of Cassino- Italy & University of Girona-Spain

Field of Study: Medical Sensors, Machine and Deep Learning, Advance Image Analysis, Medical Image Segmentation and Registration, Computer Aided Diagnosis, Computer Aided Surgery and Medical Robotics, E-Health.

EXCITE Zurich Summer School on Biomedical Imaging

Sep 2023

Swiss Federal Institute of Technology Zurich (ETH Zurich) & University of Zurich, Switzerland

Field of Study: Attended lecture series and hands-on practical session on Fluorescence microscopy, Electron microscopy, Super resolution microscopy, pre-clinical animal SPECT/CT imaging and overview of CT and MR image acquisition and post-processing in radiology on biomedical image analysis as well as obtained 4 ECTS.

MSc, Software Engineering (SE)

Sep 2018 -Aug 2020

Tianjin University, School of Computer Software, China

Field of Study: Advance Artificial Intelligence, Matrix Theory, Big Data Algorithm, Sensor and Sensing Technologies.

BSc, Computer Science & Engineering (CSE)

Oct 2010 -Feb 2014

Bangladesh University (BU), Bangladesh

Field of Study: Microprocessor & Assembly, Object Oriented programming language, Database System, Software Engineering, Web Programming, Operating System, System Analysis & Design, Artificial Intelligence.

PROFESSIONAL TRAINING

Oracle Certified Professional (OCP)

Nov 2017

IBCS-PRIMAX Software (Bangladesh) Ltd., Bangladesh

Professional Web Design & Development

Oct 2014

BASIS Institute of Technology & Management (BITM), Bangladesh

EMPLOYMENT HISTORY & EXPERIENCE

Assistant IT Manager & Full Stack developer: Vision Eye Hospital, Bangladesh	Dec 2020 -Aug 2022
Research Assistant: Tianjin University, School of Computer Software, China	Sep 2018 –Jan 2020
Web Application Developer	Oct 2019 -July 2020
SystemBind Consulting & IT Services Inc. (Remote Job), Canada	
Software Engineer: Vision Eye Hospital, Bangladesh	Oct 2017 -Aug 2018
Web Application Developer: Make Good Media. (Remote Job), Canada	July 2016 -Jan 2017
Software Engineer: Aptronix Ltd, Bangladesh	Oct 2017 -Aug 2018
Software Engineer: Coderment Ltd, Bangladesh	Apr 2014 -July 2017

TECHNICAL SKILLS

Programing Languages: Python*, MATAB, C++, PHP*

Machine learning libraries: pyQt5*, SciPy, Scikit-Learn, NumPy*, Pandas*, Matplotlib*, OpenCV*

Web Application Tools: JavaScript, ¡Query*, Vue.js/CLI*, RESTful API*, Git*, Json, XML

<u>DevOps:</u> GCP, AWS (EC2*, RDS, Load Balancing, Auto Scaling, S3*, CloudFront, Route53*, and CI/CD CodeDeploy), DigitalOcean*

Web Server: Apache*, Nginx*.

Databases: SQL, Oracle, MySQL*, SQLite

^{*} Proficient

ACADEMIC PROJECTS

Automated Skin Lesion Classification: A Comprehensive Analysis of Transfer Learning and Machine Learning Techniques (Group Project) Jun 2023

The classification of skin lesions (benign, melanoma, and seborrheic keratosis) using deep learning models and hybrid models (a combination of pre-trained and machine learning models) was done along with a comparison of the Balanced Multiclass Accuracy (BMA) of each model. The hybrid model, which combines Xception and Random Forest, produced a BMA score of 80%, which was the best.

<u>Classification Challenge: Alzheimer's Disease Classification Using MRIs and Gene</u> Expression Data

Jun 2023

To categorize Alzheimer's disease (AD), mild cognitive impairment (MCI), and control (CTL), a classification system using feature engineering and machine learning approaches was developed. carried out a comparison analysis of the AUC and MCC scores across different categorization models.

Regression Challenge: Using Linear Regression and KNN Model

Jun 2023

Developed a regression algorithm using linear regression and KNN regression and Root Mean Square Error (RMSE).

Bibliography Review: Comparative study with Automated Kidney Image Segmentation Based on Traditional & Deep Learning approach. Sep 2022 -Jan 2023

Studied research articles and prepared a review report on Automated Kidney Image Segmentation Based on Traditional & Deep Learning approaches and observed the advantages and drawbacks of each method.

Traffic (signal light) Simulation and Violation Detection

Sep 2022 -Jan 2023

[Git] [Python, pyGame]

INDUSTRIAL PROJECTS

Hospital Information Management System [PHP, Laravel, Vue CLI, MySql, AWS]

Hospital management system is a web base system that helps manage the information. Up to this point, 5 Ophthalmology Bangladeshi hospitals use this ERP system. They manage the data to all departments of hospital such as prescription, financial, investigation, pharmacy, pathology.

<u>Franchise Store Management System</u> [PHP, Codeigniter, MySql, Bootstrap, jQuery, Ajax] Control inventory levels across all your locations/stores, warehouses in real-time, so that it can make better purchase decisions & ready for sales at any time. Transfer stock/inventory between stores/warehouse is much easy that can maintain right stock level at each store.

B2B Ecommerce system [PHP, Laravel, Codeigniter, MySql, Bootstrap, jQuery, Ajax] This type of ecommerce typically involves larger orders and longer sales cycles than B2C (Business-to-Consumer) ecommerce, as the purchases are often made by businesses for resale or to be used in the production of other goods and services.

LANGUAGE SKILLS

Languages: Bengali- Mother tongue, English – B2

SCHOLARSHIPS AND AWARDS

Tianjin Government Scholarship

I received the Tianjin Government Scholarship in 2018, 2019, and 2020 while studying at Tianjin University in China. This scholarship was awarded by the local government of Tianjin, China, to support my studies during those respective years.

REFERENCES

Eric FAUVET

Associate Professor & Course Director Master in Computer Vision (MAIA-VIBOT program) Le Creusot, Franch eric.fauvet@u-bourgogne.fr

Mario Molinara

Associate Professor University of Cassino and Southern Lazio Cassino, Italy m.molinara@unicas.it