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Mohammad Istiyak Hossain Siddiquee

Recent Academic Projects

E-Parking Payment System with Blockchain and Deep Learning (October 2020 – present)

This is an on-going scientific team project whereby we are tasked to implement an automated payment system with blockchain and number-plate recognition using deep learning in Python.

Medical Image Registration using Deep Learning (August 2020 – present)

This is an on-going scientific team project where the task is to research and develop a novel medical image (MRI) registration process using Deep Learning in PyTorch.

Genre Detection of 19th Century Fictional Literature using Linguistic Features (June 2020)

In this team project, we extracted, using python, a custom feature vector based on writing style from a highly imbalanced dataset of 19th century fictional literature and compared the performances of multiple algorithms in classifying the books.

Information Retrieval System using Apache™ Lucene (November, 2019)

This Java project is part of the Information Retrieval course. Given a repository of text/HTML dataset, we were to parse, index, and store them in Apache™ Lucene. Upon searching, we were to perform a search and rank operation, based on provided string.

Professional Experiences

DevOps/Full-Stack Developer at Orion Informatics Limited

From **November 2017** to **April 2018** – 4 Months

Project NuArca is a BlockChain (IBM HyperLedger) project for automated vote casting of shareholders in stock market. Here, as part of the core team, I worked as a DevOps/Full-Stack developer. I have gathered development experience in TypeScript and Angular 4 for frontend, Java (Spring), Jasper Reporting, Junit for backend, and T-SQL, SQL Server 2016 for the database.

As **DevOps**, I was tasked to develop a system to automate the build of codebase with Docker, Gradle, and Jenkins (Pipeline DSL), along with TestNG, SonarQube. This was a solo project.

Project mCash Mobile Wallet is an R&D project for centralized mobile banking for Bangladeshi market. I was the Backend Java Developer as well as Docker and Kubernetes Administrator of this project. Here, in a brief span of time, I had the responsibility to deploy self-maintained Kubernetes cluster on bare metal, Digital Ocean, and on Google Kubernetes Engine.

Back-End Java Developer at BizMotion Limited

From **November 2014** to **November 2017** – 3 Years

Project BizPharma is a business automation software built exclusively for the pharma industry of Bangladesh. Being there from the very beginning of the product life cycle, as a back-end Java developer, I took part in designing and developing a massive ERP server in Spring and Hibernate framework from absolute scratch, including database (PostgreSQL) design, service/component design, security design, and server maintenance.

Technical Skills

Docker

- Docker, Docker-Compose, Kubernetes, Helm, Rancher, OpenShift, Istio

Infrastructure

- Terraform, Ansible
- Blockchain, Kafka, ELK Stack
- Linux, Bash, Tomcat, jboss, vmware
- aws, Google Kubernetes Engine, Digital Ocean, IBM Bluemix Kubernetes

Deployment

- Jenkins, Pipeline CI/CD, GitLab, Maven, Gradle, Apache SVN, Git, Gatling Test suite

Language and Frameworks

- Java, Python, Javascript, golang, R, php, Matlab, C, Arduino, Assembly
- Spring, Jersey REST, Hibernate, Jasper, NodeJS, NestJS, django
- PostgreSQL, MySQL, SQLite, SQL Server, T-SQL, MongoDB, Cassandra
- ReactJS, Angular9, Typescript, AJAX, jQuery
- JUnit, TestNG, Mocha, Istanbul, SonarQube
- TensorFlow, PyTorch, MLFlow
- REST, gRPC, GraphQL

Project History	<p>Java</p> <ul style="list-style-type: none"> - Library management using Jersey REST Services - Download Manager and Website Grabber - Contact manager and viewer - Multi-tabbed notepad - Web Browser - Desktop gadget for searching contacts and other system operations. <p>Android</p> <ul style="list-style-type: none"> - The Hive, a GRE vocabulary app with highest number of words - Personal Secretary, an app to attend calls and SMS on behalf of client - Automatic Call Recorder - Bulk SMS sending app. <p>Database</p> <ul style="list-style-type: none"> - Nikhoj, a website, built using PHP, MySQL, HTML, CSS, for the identification of missing/dead persons, found by charitable organizations. <p>Javascript and related</p> <ul style="list-style-type: none"> - A blog service for personal use using MEAN stack - An AI driven, location based flat recommendation system with customizable criteria set - Khoj, a location based apartment recommendation system with a set of 15 criteria for tuning the result set. <p>Arduino</p> <ul style="list-style-type: none"> - A mini-bot that senses obstacles in its path and changes direction automatically. 	
Educational Qualifications	<p>M.Sc. in Data and Knowledge Engineering (Data Science) Otto-von-Guericke University Magdeburg, Germany. CGPA (running) - 2.0</p> <p>B.Sc. (Eng.) in Computer Science & Engineering, Shahjalal University of Science & Technology, Sylhet. Year of Passing: 2014 CGPA: 3.22 (scale of 4.00)</p> <p>Higher Secondary Certificate (HSC) Noakhali Govt. College, Noakhali. Year of Passing: 2009 GPA: 5.00 (scale of 5.00)</p> <p>Secondary School Certificate (SSC) Noakhali Zilla School, Noakhali. Year of Passing: 2007, GPA: 5.00 (scale of 5.00)</p>	
Communication Skills	<p>Achieved 7.5 in IELTS (3rd May 2019) Score Breakdown: Listening 9, Speaking 7, Writing 6, Reading 8</p>	
Organizational Experiences	<p>President, United Cultural Alliance, an alliance of 14 prominent organizations of SUST From November 2013 to February 2014</p> <p>General Secretary, SUST Science Arena From December 2012 to February 2014</p> <p>Sylhet Divisional Coordinator, Science Popularizing Society, Bangladesh (SPSB) From January 2013 to December 2014</p>	
References	<p>Mahmudul Haque Fahim Project Manager, BizMotion Limited mahmudul.fahim@gmail.com</p>	<p>M. Jahirul Islam, PhD., PEng. Professor, Dept. Of CSE, SUST. jahir-cse@sust.edu</p>