ABU SAYEM MD HABIBULLAH

Xidian University (西安电子科技大学), 710071, Xi'an, Shaanxi, China

Education

Master of Engineering (MEng), Computer Science and Technology   *Sep 2022 – Jul 2025*
School of Computer Science and Technology, Xidian University   *Xi'an, China*
GPA: 91.24% (in Degree)
Thesis Title: Stock Market Price Forecasting Using Deep Reinforcement Learning Techniques (FinDRL Approach)

Bachelor of Engineering (BE.), Computer Science and Technology   *Sep 2018 – Jul 2022*
School of Information Science and Engineering, Yunnan University   *Kunming, China*
GPA: 80% (in Average)
Thesis: Cross Border E-Commerce Solution (B2B & B2C)

Job Experience

Remote - Software Engineer | ML Engineer | Autofficina Internazionale s.a.s   **May 2021 – Ongoing**
- SaaS application offering services: Customer appointment management, Marketing system, Dynamic page builder, URL shortener, and Telematics implementation to enhance business operations.
- Documented improvements, highlighting significant reduction in data size and storage. Reported a 33.33% improvement in storage efficiency.
- Successfully increased customer satisfaction by 10% by building a Deep Neural Networks model to provide solutions for 14 vehicle problems via our company's services.
- Improved server query response by 15% through engineering best practices with Microservices architecture, DCS, and CI/CD pipeline

Remote - IT Team Instructor | BreezeBangladesh LTD   **Jan 2021 – Apr 2023**
- I offered technical assistance to the IT team beyond established working hours to utilize my expertise to troubleshoot and resolve customer issues.
- Develop customer trust by evaluating the criteria and optimizing customer guidance.
- Software development pipelines through CI/CD, increasing the development team's speed by 20%.

Web Application Developer & SEO – Teacher | Bright Host IT Institute   **Jun 2017 - Aug 2018**
- Proficient in creating responsive and user-friendly web designs focusing on SEO best practices.
- Skilled in optimizing website speed, performance, and mobile-friendliness to improve search engine rankings.
- Experienced in implementing technical SEO, including structured data and XML sitemaps, to enhance site crawlability.
- Adept at training teams on keyword research, on-page SEO strategies, and content optimization.
- Knowledgeable in utilizing analytics tools to monitor website performance and refine strategies.
- Expert in secure coding practices and maintaining SEO integrity during web development.

Publication

- An empirical study on corporate social responsibility, environmental regulation and financial performance-Based on heavy pollution industry - ISSN: 2309-7892 (Online), 2519-5530 (Print), Volume: 10, Issue: 1, Page: 06–17, January-June 2022
- Research on the Impact of Fiscal and Tax Policies and Social Responsibility on the Financial Performance of Listed Chinese Agricultural Companies - Volume 5, Issue 2 (May 2021), P.P.87-101, ISSN: 2521-0793
- End-to-End Stock Market Technical Indicator Parameters Optimization and Performance Analysis: A Dynamic Approach – Submitted
- Stock Market Technical Indicator Parameters Optimization and Performance Analysis: A Deep Learning Approach – Submitted
- LDCS: Accurate and Efficient LDoS Attack Detection Based on CyclicSketch – Submitted
- FinDRL: Financial Deep Reinforcement Learning: A Perfect Way to Manage Stock Trading Portfolios - Ongoing
- scAutoSeq: A Python-Based Automated Pipeline for Single-Cell RNA Sequencing Data Analysis – Ongoing
- The Role of m6A in Cancer Progression: A Deep Learning-Based Transcriptomic Investigation- Ongoing
- Comparative Analysis of T-Cell Acute Lymphoblastic Leukemia (T-ALL) Isolation Methods for scRNA-Seq - Ongoing

Research Experience

Research Assistant (RA) *Oct 2022 - Present*

State Key Lab: Institute of Big Data and Visual Intelligence, Xidian University (XDU)
- Optimization Algorithm, Portfolio Management, Dynamic Market Prediction, Data-Driven Methods, Artificial Intelligence, Financial Deep Reinforcement Learning (FinDRL)
- Research Title: Stock Market Price Forecasting Using Deep Reinforcement Learning Techniques (FinDRL Approach)
- **Supervisor: Prof. Dr. Wang Shuzhen**

Undergraduate Research Work *Feb 2022 - Jul 2022*

Yunnan University (YNU)
- Thesis Title: Cross Border E-Commerce Solution (B2B & B2C)
- Integrates supply chain, and government logistics, enabling efficient product delivery with robust Microservice architecture.
- Tech: Docker, Kubernetes, MongoDB, Redis, PostgreSQL, TS, and Python.
- **Supervisor: Prof. Dr. Xiaobing Zhou**

Project Work

Develop: Vehicle Automation System and Customer Relation Management (CRM) May 2021 – Ongoing
- Associated with Autofficina Internazionale s.a.s
- Stack: Docker, Kubernetes, Heroku, AWS, MongoDB, Redis, PostgreSQL, NextJs, and TensorFlow.

China Bangladesh E-commerce integrating transportation and marketing May 2022
- Associated with Yunnan University

China-Bangladesh e-commerce mobile platform integrated with transportation and sales Jan 2022
- Associated with Yunnan University

Smart Charging Station Architectural Design and Development *2021 – 2022(7th Semester)*
- Associated with Yunnan University
- Stack: ReactJS, Arduino (ESP32), C++, and PostgreSQL

Research Interest

- Data Science
- Bioinformatics
- Machine Learning (DL/DRL)
- Computational Genomic
- Optimization Techniques

Skills

- Programming Languages: C++, Python, TS
- Frameworks: NodeJs, ReactJs, TensorFlow, PyTorch, MLflow, Docker, Kubernetes, Kubeflow
- Concepts: AWS, HTTP, and gRPC Protocol, and Deep Learning
- Office and Document Applications: Microsoft Office, LaTex
- Soft Skills: Problem-Solving, Project Management, Leadership, Adaptability, Time Management

Certifications

- Complete Machine Learning & Data Science Bootcamp-2022 Mar 2022
  - Issued by Udemy
- Algorithms & Data Structures May 2021
  - Issued by Udemy
- Design Patterns in Python May 2021
  - Issued by Udemy
- Microservices with Node JS and React Mar 2021
  - Issued by Udemy

Extracurricular Activities

- Genetic Epidemiology of Pain - Dr Maxim Freydin   Nov 29, 2024
    - Hosted By: Paul A, Manuel Corpas and Mr Mustafa Ghafouri & Organized by Meetup
- Silicon Valley Business Networking (Online)   Oct 22, 2024
    - Hosted By: Rob & Organized by Meetup
- Solve Problems using Reinforcement Learning 强化学习   Dec 31, 2023
    - Hosted By: Jennifer & Organized by Meetup
- 20, 21, 22 - Yunnan University "Cloud Cup" Volleyball League   May (2020, 2021, 2022)
    - First Prize
    - Sponsor: Yunnan University Sports Committee & Organized by the Youth League Committee of the school and the School of Physical Education Co-organized by: Yunnan University Volleyball Association

Achievement & Award

- Provincial Government (Huashan) Scholarship (Full Funded)   Sep 2022 to Sep 2025
    - Scholarship issued by Xidian University (XDU)
- Officer: Sports Department - International Student Union, Xidian University   Nov 2023
- National Undergraduate E-commerce "Innovation, Creativity and Entrepreneurship"   May 2022
    - Position 12th, issued by Yunnan University
- Sino-Bangladesh Express - China-Bangladesh e-commerce mobile platform integrated with transportation and sales   May 2022
    - 12th National College Competition Student "Mobile App - E-commerce Innovation", issued by Yunnan University

Language & Test Scores

Bengali: Native, English: Professional, Chines: Conversational

Reference

Prof. Wang Shuzhen
School of Computer Science and Technology
Xidian University, Xi'an, P.R.C.
E-mail: shuzhenwang@xidian.edu.cn

Associate Prof. Wang Jin
School of Information Science and Engineering
Yunnan University, Kunming, P.R.C.
E-mail: jing.wang.guan@ynu.edu.cn