ASHRAF ABDUL-MUUMIN

3201 S State Street, Chicago, Illinois, 60616 | 442.224.9933 | aabdulmuuminyakuubye@hawk.iit.edu |
https://www.linkedin.com/in/chirix33 | https://chirix.netlify.app | https://www.github.com/chirix33

EDUCATION

Illinois Institute of Technology, Chicago, IL   Aug 2024 – May 2026
Masters, Information Technology, GPA: 4.0

Garden City University College, Kumasi, Ghana   Sep 2018 – Jun 2022
Bachelor of Science, Computer Science

WORK EXPERIENCE

Full Stack Engineer
Onesolution – Kumasi, Ghana   Sep 2023 – Aug 2024
- Developed the **PHP desktop application version** of the Point of Sales web app, ensuring consistent user experience across platforms. Adoption rate increased to 63% due to improved offline capabilities and enhanced UI responsiveness.
- Enhanced system performance by optimizing SQL queries and database indexing, reducing query **execution time by 45%** and improving checkout **processing speeds by 37%**, leading to a smoother end-user experience.
- Integrated backend services using **Express.js**, establishing reliable real-time synchronization mechanisms that processed over roughly **600 API requests** daily to ensure sales and other information reflected instantly.

Junior Backend Engineer
Kwame Nkrumah University, Kumasi, Ghana   Sep 2022 – Aug 2023
- Modified students' database of the Student Portal for the University, resulting in a reduction of data fetching complications and data inconsistencies by more than 50%.
- Produced a Data Export UI page for other departments to operate, eliminating the need for seeking the UITS department's assistance with exporting data directly from database. All departments now make use of this page.
- Engaged in weekly meetings to receive collaboration tasks with other developers. All tasks were completed timely and were organized for Supervisors. Instructed to re-submit a report two times in one year.

VOLUNTEER EXPERIENCE

Software Engineer (AI/ML)
AIFS – Chicago, IL   Oct 2024 – Present
- **Enhanced** semantic understanding and message processing capabilities by integrating Microsoft's Semantic Kernel using C#, leading to a **35% improvement** in AI-driven response accuracy and reducing processing latency by **40%**.
- **Optimized** data storage and retrieval by implementing **Azure Cosmos DB**, reducing query response time from **250ms to 80ms** and scaling efficiently to handle **300K+ messages per month**.
- **Implemented** a **user management service** leveraging **Microsoft Entra ID**, enhancing security and access control, reducing unauthorized access incidents by **60%**, and improving authentication reliability with **99.9% uptime**.
- **Automated** deployment workflows for Azure Function Apps using GitHub Actions, cutting deployment time from **15 minutes** to **under 3 minutes**, reducing manual errors by **80%**, enabling seamless CI/CD operations.
- **Deployed** a highly scalable HTTP Azure Function App using .NET and Azure, increasing request processing efficiency by **50%**, reducing cloud costs by **25%**, and supporting **10,000+ requests per second**.

PROJECTS

A. **Recipe Sharing App -** https://recipe-share-app.vercel.app
- Designed and developed an app for users to submit, search for, and view recipes.
- Built with **Vercel, PostgreSQL, Azure, DevOps (Agile simulation), NextJS, TailwindCSS, NextAuthJS, TypeScript, NodeJS, and OpenAI**.

B. **Python Web Scraper and Content Extractor/Comparer -** https://github.com/chirix33/WebScrapeInsight

- Engineered a **Python** web scraping program that extracts semantic content from 150+ websites and performs weekly comparisons to identify changes; resulted in **40% zero-cost increase** in content accuracy for AIFS.

C. **PredictBo – Bo Predictor –** https://huggingface.co/spaces/predictbo/predictbo

- Developed a web app to estimate Bo using an end-to-end Deep Neural Network pipeline trained on 812 data point observations utilizing features including Bubble Point Pressure, Temperature, Solution Gas-Oil Ratio, and API Gravity.
- Achieved an MSE of 0.0026, R^2 of 95.46%, and MAE of 0.0347 on the testing set.
- Skills used were Discretization, Regularization, Adam Optimization, Bayesian Optimization, Deployment, Pipeline Automation, Version Control and Cross-Disciplinary Collaboration.

SKILLS

Languages | C#, PYTHON, TYPESCRIPT, JAVASCRIPT, PHP, SQL (POSTGRESQL, MYSQL), HTML, CSS

Frameworks | .NET, NEXTJS, REACTJS, NODE.JS/EXPRESSJS, JQUERY, TAILWINDCSS, BOOTSTRAPCSS, NUMPY

Tools | MICROSOFT AZURE, VERCEL, GIT, DOCKER, AI, FIGMA, KERAS, TENSORFLOW, STREAMLIT, DATA VISUALIZATION, MATPLOTLIB, SEABORN, PANDAS, PROSPER, PETREL

Technical Competencies | RESTFUL API, AGILE, RESPONSIVE DESIGN, USER INTERFACE DESIGN, USER EXPERIENCE, DATA STRUCTURES, LINUX, BASH, OPERATING SYSTEMS, DATA MODELS, MICROSERVICES, SDLC, DESIGN PATTERNS