Muhammad Blal

muhammadblal11@gmail.com | linkedin.com/in/muhammadblal | github.com/muhammadblal433 | 319-350-0641

EDUCATION

Iowa State University   Expected Graduation: **May 2027**
Bachelor of Science in Computer Science: GPA: 3.43/4.0   *Ames, IA*

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, C/C++, C#, SQL, HTML, CSS, Dart, Swift
Frameworks: Angular, React.js, Next.js, Node/Express.js, MongoDB, Flask, Spring Boot, FastAPI, PostgreSQL
Developer Tools: AWS, Azure, OpenAI, Postman, Git, Docker, Google Cloud Platform, REST APIs, Android Studio
Libraries: Pandas, Scikit-learn, Keras, NumPy, Tkinter, Matplotlib

EXPERIENCE

Software Engineer Intern   May 2025 – Aug 2025
J.B. Hunt Transport Services, Inc.   *Lowell, AR*
- Engineered and launched a net-new platform UI feature for the J.B. Hunt 360 personnel and driver panels using Angular, TypeScript, and large language models (LLMs), enhancing usability, engagement, and operational efficiency for **35,000+ daily users** at a **Fortune 300 enterprise**.
- Improved backend microservices with Spring Boot, Quarkus, and Java through efficient data handling, unit testing, and queries in MongoDB and Elastic Search to support new front end feature.
- Employed Canary deployments in Kubernetes CI/CD yaml pipelines and back end modular service architecture, contributed to a projected operational savings of **$250,000** over the next 5 years.

Software Engineering Simulation   Jun 2025 – Jul 2025
JPMorgan Chase   *Remote*
- Designed and deployed a **Kafka-based** transaction processing system in **Spring Boot**, improving transaction validation speed by **30%** and **ensuring 100%** data integrity in an H2 **SQL database**.
- Integrated an **external Incentives API** to dynamically apply rewards, optimizing real-time balance updates and enhancing transaction accuracy.

Web Application Developer   Aug 2024 – Mar 2025
XO Foods (Chester's)   *Waterloo, IA*
- Built a full-stack restaurant website using React.js, Node.js, and Express, resulting in a **35%** increase in online orders and expanding customer reach across the Waterloo area.
- Implemented responsive UI components and optimized page performance, leading to a **50%** improvement in mobile user engagement and reducing bounce rate by **20%.**
- Integrated SEO strategies and Google Analytics tracking, enabling data-driven content updates that boosted monthly website traffic by **60%.**

PROJECTS

Bitcoin Price Predictor | *Python, Scikit-learn, Pandas, Matplotlib, yFinance*   Aug 2025 – Sep 2025
- Built a machine learning model with lag features and technical indicators, improving price prediction accuracy by **15%** compared to baseline methods.
- Automated data via **yFinance API** and built iterative forecasts projecting Bitcoin trends into **2026**, with outputs saved as CSV/PNG visualizations.

EasyCal | *React, Node.js, Express, MongoDB, FastAPI, Python, Ollama*   Feb 2025 – May 2025
- Built a full-stack nutrition and recipe planning web app used by **Iowa State University students**, featuring dynamic food search, recipe tracking, and restaurant listings.
- Integrated an AI-assisted recipe generator using **Ollama LLM** and **FastAPI**, enabling personalized meal recommendations and boosting user engagement by over **40%**.
- Implemented secure developer login and full **CRUD operations** for recipes and restaurants, streamlining content management and reducing manual entry workload by **50%**.

LEADERSHIP

Computer Science and Software Engineering Club (CSE) | *Member*   September 2024 – Present
Pakistan Student Association | *Member*   September 2024 – Present