MD. ABU JAFOR

Frontend Engineer | AI & Computer Vision

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PROFESSIONAL SUMMARY

Computer Science & Engineering graduate focused on full-stack and frontend development with React, Next.js, TypeScript, PostgreSQL, and Supabase. Experienced in shipping production-oriented web applications from database design and API integration through deployment and post-launch QA. Architected and delivered a client-facing e-commerce platform for Aroma Avenue, including custom payment verification, inventory protection, authentication, row-level security, and an administrative back office. Also experienced in applied AI and computer vision through a YOLO-based rice crop disease detection capstone.

TECHNICAL SKILLS

Frontend	HTML5, CSS3, JavaScript, TypeScript, React, Next.js, Tailwind CSS
Database	PostgreSQL, Supabase, MySQL, Row-Level Security
AI / Computer Vision	YOLO, OpenCV, Image Processing, Dataset Preparation, Annotation
Backend / APIs	REST APIs, API Integration, Server-Side Logic, JSON
Programming	JavaScript, TypeScript, Python, PHP, SQL, C/C++
Tools / Deployment	Git, GitHub, Vercel, Google Colab, Roboflow, Streamlit

EXPERIENCE

InitZone **06/2026 – 08/2026**
Frontend Developer Intern *Remote, Bangladesh*

- Developed responsive frontend features using React, Next.js, and TypeScript within a software engineering team.
- Integrated frontend components with APIs, debugged application issues, and maintained clean, reusable code.
- Collaborated through Git/GitHub workflows, including feature branches and pull requests.

BAIUST Computer Club **08/2025 – 02/2026**
HR Intern *Cumilla, Bangladesh*

- Coordinated communication between interns and management using Slack for updates, attendance, and task tracking.
- Supported recruitment, onboarding, performance monitoring, and day-to-day operations of a student software engineering internship program.
- Maintained intern progress and task-completion records while communicating deadlines and operational requirements.

FEATURED PROJECT

Aroma Avenue – Full-Stack E-Commerce Platform *Next.js 16, TypeScript, Supabase, PostgreSQL, Vercel*

- Architected and shipped a production e-commerce platform for a paying client end-to-end, covering database schema, authentication, product catalog, checkout, payments, inventory, CMS, admin tooling, and deployment.
- Designed a fraud-resistant manual payment-verification workflow using mobile-wallet transfers and administrator confirmation after identifying limitations of standard card gateways in the target market.
- Implemented transaction-ID uniqueness constraints and stock hold/commit/release logic to prevent duplicate payments and overselling while orders wait for payment verification.
- Implemented row-level security across application tables and added automated CI validation to verify that anonymous requests cannot write to protected data.
- Built a complete admin back office for product and variant management, order and payment queues, coupons, and CMS operations, allowing store staff to manage daily operations without developer intervention.
- Performed iterative QA against the live production deployment, diagnosing and fixing real UI, data, authentication, and workflow issues after launch.

PROJECTS

AgriBot – Rice Crop Disease Detection & Remedy Recommendation *YOLO, Python, OpenCV*

- Developed an AI-based rice disease detection system targeting False Smut, Sheath Blight, Sheath Rot, and Stem Borer.
- Built a dataset of 3,134 raw images, expanded to 20,744 augmented images with 42,114 annotated instances.
- Trained and evaluated multiple YOLO-based models; the best representative configuration achieved mAP@0.5 = 0.774 and mAP@0.5:0.95 = 0.457.
- Integrated a web interface, robot prototype, and rule-based remedy advisory for agricultural decision support.

Multi Sheba – Digital Service Ordering Platform *Next.js, TypeScript, Supabase*

- Built a bilingual digital-service platform with service browsing, dynamic order forms, order tracking, and customer-facing workflows.
- Developed responsive interfaces with reusable Next.js and TypeScript components and integrated Supabase for database, storage, authentication, and order management.
- Added an AI chatbot interface for service navigation and frequently asked questions.

Plant Disease YOLO Dataset Preparation Tool *Python, Streamlit, OpenCV, YOLO*

- Developed an interactive Streamlit tool for preparing plant-disease datasets in YOLO format through image annotation and processing.
- Implemented free-draw annotation, Gaussian blur, grayscale background processing, real-time preview, binary masks, YOLO labels, and metadata generation.

Weather Dashboard – Real-Time Weather Application *React, JavaScript, REST APIs, Vite*

- Developed a responsive weather dashboard with city search, current conditions, five-day forecasts, temperature trends, and country information.
- Integrated OpenWeatherMap and REST Countries APIs with search history, local storage, theme support, API error handling, and responsive layouts.
- Deployed the application on Vercel.

EDUCATION

Bangladesh Army International University of Science and Technology (BAIUST), Cumilla **2022 – 2026**
B.Sc. in Computer Science and Engineering
CGPA: 3.49 / 4.00
Final-year capstone: AgriBot – AI-based rice disease detection and remedy recommendation system.

Meah Bazar College **2019**
Higher Secondary Certificate (HSC)
GPA: 4.92 / 5.00

LEADERSHIP

Hall Representative, BAIUST Hall Authority **09/2025 – Present**
Cumilla, Bangladesh

- Acted as liaison between students and hall administration to address issues, concerns, and follow-up actions.
- Communicated hall notices, meetings, and updates; supported coordination among residents.
- Received formal recognition for service as Hall Representative.

Organizer, BAIUST CSE Fest & CSE Fall Fest **2025**
Cumilla, Bangladesh

- Supported planning, communication, logistics, and execution of departmental events.
- Assisted quiz and hackathon segments and helped manage participant coordination.

CERTIFICATIONS & RECOGNITION

- Machine Learning Training – Creative IT Institute (2023)
- Front-End Development Training, 80 Hours – EDGE / Bangladesh Computer Council (2024–2025)
- Certificate of Achievement – HR Intern, BAIUST Computer Club (2025)
- Certificate of Recognition – Organizer, BAIUST CSE Fest 2025
- Certificate of Recognition – Organizer, BAIUST CSE Fall Fest 2025

Languages & Extracurricular Activities

Languages

Bangla(Native), English(Working Proficiency), Hindi(Fluent)

Extracurricular Activities

Marathon, gaming, reading, event organizing, academic project development, and sports.