ABRAR SHAMS CHOWDHURY
Software Engineer

+8801836096182 • chowdhury.abrar.shams@gmail.com • Portfolio

Innovative software engineer with extensive experience in developing web applications using modern frameworks. Proficient in building microservices, crafting seamless user experiences, designing modular and scalable systems, and integrating machine learning models to enhance software functionality. Quick to learn new technologies and highly effective at applying them. Committed to continuous learning as a way of living.

Education

Independent University Bangladesh
BSc in Computer Science & Engineering   01/2015 - 01/2021

Experience

Vatiero Freelance Contract
Senior Software Engineer   01/2025 - Present

Primary Stack: Next.js, Nest.js, TypeScript, PostgreSQL, Prisma, Shadcn
- Layout the architecture and development of core product modules for a SaaS platform offering invoicing, billing, reconciliation, and accounting features.
- Integrate third-party financial APIs (e.g., GoCardless) for real-time transaction syncing and workflow automation.
- Implement an inbox feature to intercept and parse inbound emails directly into the system.
- Collaborate closely with the designer to ensure alignment between product functionality and user experience.
- Establish coding standards, conduct code reviews, and mentor junior developers to help them deliver high-quality output.

Techdojo Ltd
Software Engineer   08/2023 - 12/2024

Primary Stack: MERN, Next.js, Vanilla.js, Ts, Three.js, Blender, Python
- Develop innovative web and web-based VR applications tailored to experimental product ideas and client-driven research.
- Responsible for integrating third-party machine learning services to enable intelligent features.
- Operate within a flexible, evolving tech stack, adapting quickly to project-specific demands while maintaining rapid delivery cycles.
- Engage in direct collaboration with international clients, contributing to both technical planning and user-centric product development.

Bioforge Health Systems Ltd
Software Engineer   11/2020 - 07/2023

Primary Stack: React.js,Node.js, Express, MongoDB, PostgreSQL, Material UI
- Design and construct modules for an integrated hospital management system, primarily utilizing a microservices architecture.
- Develop rapid, responsive, and interactive web applications with a strong focus on user experience (UX).
- Implement componentization and application structuring using React.js to optimize development efficiency for both myself and my team. Prioritizing readability, reusability, and scalability.
- Engage in system design dialogues, emphasizing scalability, system flow, user requirements, and data management priorities

Skills

Programming & Development:	JavaScript, React, Next.js, Node.js, Nest.js Python, TypeScript, Express, MongoDB, PostgreSQL, Firebase,Three.js, HTML, CSS, GSAP, Material UI, Git, GitHub, etc.
Machine Learning Integration:	OpenAI, Gemini, Amazon Polly, Hugging Face, MediaPipe.
3D Modeling & Animation:	Blender, Character Creator 4, Mixamo, AutoCad 360.
UI/UX Design:	Figma, Photoshop, Illustrator, Procreate.

Key Achievements / Certifications

MIT SOLVE

Winner of the MIT SOLVE challenge, recognizing innovative solutions for social entrepreneurship.

Uni Rover Challenge

Ranked 10th in the University Rover Challenge, demonstrating advanced engineering and teamwork capabilities.

Film Contest

Runner-up in an inter-university film contest focused on biodiversity conservation, highlighting creativity and social engagement.

COMPLETE WEB DEV BOOTCAMP   Udemy

RESPONSIVE WEB DESIGN
Free code camp

JS ALGO AND DS
Free code camp

Other Experience

Bioforge Health Systems Ltd

Product Designer   10/2019 - 09/2020

- Design and build medical IoT devices (hardware)
- Make sketches for rapid idea generation and Translate sketches into 3D models using Autodesk 360
- Build scaled-down models using 3D printing and other crafting techniques
- Bring the product to life with 3D printing, CNC cutting, Molding and also working with external vendors

American Center Dhaka (MakerSpace)

Volunteer Teacher   2017 - 2018

A creative hub with state-of-the-art tools, enabling hands-on STEM learning and technical skill development.

- Prepare and deliver programming, robotics, and 3D modeling workshops for students.
- Design curriculum and engaging demos to simplify technical concepts for hands-on learning.

References

SHAMA HOQUE
MANAGING DIRECTOR
Techdojo Limited

+14089827606
shama@tech-dojo.org

DR. Dewan Choudhury
CEO
Bioforge Health Systems LTD

+8801759515542
dr.dewan@bioforgehealth.org

SANZAR ADNAN ALAM
Lecturer
Independent University BD

+8801708123433
sanzar@iub.edu.bd