MUHAMMAD RAJIB HAWLADER

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SUMMARY

Dynamic Software Engineer with a strong background in application design and deployment at Brotecs Technologies Limited. Skilled in Python, JavaScript, and DevSecOps, with growing expertise in LLM integration, Retrieval-Augmented Generation (RAG), and AI agent systems. Focused on delivering user-centric solutions, optimizing software architecture, and building secure, AI-driven applications. A Cisco-certified Ethical Hacker and proven leader in mentoring and driving technical teams toward innovation.

SKILLS

- **Programming:** Proficient in Python (automation, scripting, multi-threading), JavaScript (ES6+, front-end and back-end development), C/C++ (performance optimization, system-level software), and PHP (modern standards, MVC architecture)
- **AI & LLM Engineering:** LLM integration and Retrieval-Augmented Generation (RAG) pipelines (vector databases, embeddings, semantic search); local LLM deployment and self-hosting on on-premise infrastructure (privacy-preserving, offline-capable inference); AI agent design and orchestration (tool use, multi-step reasoning, autonomous workflows)
- **AI Integration & Frameworks:** Integrating OpenAI and other model APIs into production systems, fine-tuning models with proprietary datasets, and leveraging TensorFlow and PyTorch for custom solutions
- **Frameworks:** Extensive experience with Node.js (high-performance server applications), AngularJS (dynamic SPAs), and Laravel (elegant back-end systems, Eloquent ORM)
- **Web Development:** Strong skills in HTML5, CSS3 (responsive design, pre-processors), and REST API development (scalable, secure APIs, versioning, testing)
- **Databases:** Expertise in SQL (query optimization, relational database design) and NoSQL (MongoDB, Redis) for building scalable, high-performance applications
- **Cloud & Networking:** Advanced knowledge of AWS (EC2, S3, Fargate, RDS), DevSecOps (CI/CD, Docker), and Linux-based networking (network services, system administration, custom ISO building)
- **Cybersecurity:** Cisco Certified Ethical Hacker — vulnerability assessment, scoping, and mitigation strategy; penetration testing fundamentals with Kali Linux, WebSploit, and related tooling; secure application and network hardening
- **Tools:** Proficient in Git (branching, merging, conflict resolution) and GitHub (collaboration, CI/CD integration)

EXPERIENCE

Senior Software Engineer *11/2024 - Current*
Brotecs Technologies Limited • Dhaka, Bangladesh

- Led the software development lifecycle from inception to deployment, delivering secure and high-quality full-stack applications.
- Mentored junior engineers, fostering collaboration and guiding them throughout development processes.
- Engineered end-to-end solutions, integrating DevSecOps practices to enhance security, reliability, and operational efficiency.

Software Engineer II *11/2023 - 10/2024*
Brotecs Technologies Limited • Dhaka, Bangladesh

- Led design, development, and deployment initiatives for scalable, user-focused software solutions.
- Mentored junior engineers and played a key role in recruitment, ensuring team cohesion.
- Collaborated with cross-functional teams to enhance performance and align with evolving business needs.

Software Engineer I *11/2022 - 10/2023*
Brotecs Technologies Limited • Dhaka, Bangladesh

- Designed and developed software applications, prioritizing user experience and technical integrity.
- Worked closely with cross-functional teams to ensure smooth project delivery.
- Contributed to architecture optimization through active participation in code reviews.

Junior Software Engineer *05/2021 - 10/2022*
Brotecs Technologies Limited • Dhaka, Bangladesh

- Focused on high-quality coding standards and enhancing user experience in multiple software projects.
- Efficiently managed project timelines and collaborated on software design strategies.
- Documented software designs for stakeholders.

EDUCATION

Bachelor of Science (BS) in Computer Science and Engineering *03/2021*
East West University • Dhaka

HSC in Science *04/2015*
Notre Dame College • Dhaka

LICENSES & CERTIFICATIONS

Ethical Hacker — Cisco (Cisco Networking Academy) *Issued Jul 2026*

- Broad understanding of legal and compliance requirements; proficient in scoping, executing, and reporting vulnerability assessments and recommending mitigation strategies. Completed 34 hands-on activities using Kali Linux, WebSploit, and related tools.

Credential: Verify

PROJECT HIGHLIGHTS

Smart Cabin Router

A connectivity solution tailored for business aviation, enabling secure and robust in-flight internet access and operational communications.

- Played a pivotal role as a core developer and part of the leadership team, developing new features and leading the OS version upgrade.
- Packaged the entire system, built, and delivered the final ISO release, ensuring seamless installation and reliability for clients.

Intelligent Ops Center

An AI-enabled platform for real-time monitoring, predictive maintenance, and secure communication for business aviation operations.

- Contributed as a developer and part of the leadership team to design and implement advanced features.
- Played a key role in advancing the patented iOp technology and the military-grade ASCP protocol for secure air-to-ground communication.

Cybersecurity Firewall Platform

A next-generation cybersecurity platform providing comprehensive protection for networks, cloud, OT/ICS environments, endpoints, and IoT devices.

- Built the ISO by integrating code from multiple teams, ensuring seamless installation on hardware.
- Contributed as a member of the development team, enabling deployment of this all-in-one solution for advanced threat detection, Zero Trust architecture, and operational resilience.

Second Phone Line

A virtual phone service offering worldwide phone numbers and a second phone line on smartphones for seamless communication at competitive rates.

- Worked as part of the development team, primarily focusing on the API side to build features.
- Maintained and advanced key functionalities such as intelligent call forwarding, Do-Not-Disturb (DND) mode, and seamless international communication.

RMM Software for MSPs

An advanced network management solution featuring AI-enabled capabilities for efficient and proactive operations.

- Contributed as a developer and played a key role in integrating AI capabilities into the project.
- Enabled features like the AI Virtual Assistant for simplifying complex tasks and intelligent automation for proactive network management.

PROFILES

💼 **LinkedIn:** mrajibh
🐙 **GitHub:** mrajibh
🌐 **Portfolio:** rajib.uk
📘 **ResearchGate:** Muhammad-Rajib-Hawlader