

SAGAR BISWAS

Dhaka, Bangladesh | +880 1727 361077 | sagarbiswas@multihat.dev
github.com/SagarBiswas-MultiHAT | sagarbiswas.multihat.dev | multihat.dev
facebook.com/groups/aiubcybersecurityandprogrammingsociety | linkedin.com/in/sagarbiswas-multihat

SUMMARY

Software, AI, and security engineer who builds production web products and then tests them the way an attacker would. Founder of MultiHAT, an independent R&D lab with 10 live products, a CVSS-scored passive recon case study, and 95+ private and public GitHub repositories. Open to software engineering, web application security, and AI agent roles or internships.

TECHNICAL SKILLS

Security: Web Application Security, OWASP Top 10, Penetration Testing (lab environments), Passive OSINT, Attack Surface Mapping, Threat Modeling (STRIDE), CVSS Scoring, Responsible Disclosure, Burp Suite, Nmap, Wireshark, Exploit Development (self-study)
Languages and Frameworks: Python, TypeScript, JavaScript, PHP, C, C++, Bash, Arduino Script, SQL, Next.js, React, NestJS, Node.js, Express.js, Flask
Data and DevOps: PostgreSQL, Supabase, Prisma ORM, Docker, CI/CD, Linux, Git, REST APIs, Payments (aamarPay, bKash, Stripe)
AI: LLM and Agent Integration (Gemini, Groq, OpenRouter), Dual-AI Consensus Verification, NLP, Speech Recognition, Voice Assistants
SEO: Technical SEO, Local Business Schema (JSON-LD), Automated Sitemaps, Core Web Vitals, Edge-Delivered Next.js

EXPERIENCE

Founder and Software, AI and Security Engineer | MultiHAT.dev (independent R&D lab) May 2026 to Present

- Build and ship production web products, 21 so far and 10 of them live, covering e-learning, AI tooling, security utilities, and client sites, mainly in Next.js, NestJS, React, TypeScript, and Python.
- Offer clients custom web builds, technical SEO, payment gateway integrations, and security hardening through the studio.

Founder and Administrator | AIUB CyberSecurity and Programming Society Aug 2024 to Present

- Lead a growing online student community of 1,200+ members at AIUB focused on ethical hacking, defensive security, and programming, with practical workshops and shared learning resources.

PROJECTS

RECON-2026-01: Passive Security Assessment | OSINT, CVSS, sanitized public report sagarbiswas-multihat.github.io/capabilities/

- Ran an authorized passive and semi-active recon assessment (no exploitation) of a production web platform and documented 15 findings, including a leaked origin hostname enabling Cloudflare bypass, a publicly accessible storage bucket, an open login redirect, no confirmed OTP rate limiting, user enumeration, and missing CSP and HSTS headers.
- Scored findings with CVSS v3.1, mapped them to CWE, traced attack chains to account takeover, and sent prioritized fixes to the platform's administrators under responsible disclosure.

MultiHAT Academy | Next.js 15, NestJS 11 academy.multihat.dev

- Built a live e-book and certification platform with completion quizzes, publicly verifiable certificates, role-based access control, a learner wallet with referral rewards, and aamarPay checkout for local payments.

PhishGuard | OpenRouter, Groq phishguard.multihat.dev

- Created a browser game that gives players 10 seconds to judge each phishing email, with a dual-AI consensus engine generating and verifying the scenarios so every round stays realistic and unique.

promptVault | React 19, TypeScript, Node.js, Supabase, Gemini promptvault.multihat.dev

- Developed an offline-first prompt library with a PIN-locked vault, template variables, and Supabase sync under row-level security; its AI Librarian scores and rewrites prompts through a Node API that tries Gemini, then Groq, with keys kept server-side.

Sydney Wheels and Tyres (client project) | Next.js, TypeScript, Tailwind CSS sydneywheelsandtyres.com.au

- Delivered a marketing site for an Australian auto-services business with local business schema and automated sitemaps.

Security tooling | Python github.com/SagarBiswas-MultiHAT

- Wrote attack-surface-toolkit (passive DNS, WHOIS, SSL, header, and archive checks, 0 to 100 exposure score), osint-exposure-toolkit (email, domain, and username leak checks), Web_Vulnerability_Scanner-AI (rate-limited crawler flagging header, cookie, XSS, and SQL error issues, with AI triage), and WebSource-Harvester (depth-limited site mirroring).

OPEN SOURCE AND PUBLICATIONS

- Maintain 80+ public repositories with 1.7K+ total stars, including four open roadmaps: a 60-week penetration testing curriculum (500+ free labs), The-BlackHAT-roadmap (45K+ lines, 150+ diagrams), 35 cybersecurity career paths, and 70+ free security books.
- Write open-access technical material: 33 notebooks on web security, networking, Python, C/C++, JavaScript, React, PHP, and NestJS, plus 10 articles on OSI-layer attacks, Wi-Fi hardening, and post-quantum cryptography.

EDUCATION

BSc in Computer Science and Engineering | American International University-Bangladesh (AIUB), Dhaka Apr 2022 to Present

Higher Secondary Certificate (HSC, Grade 12 equivalent) | Habibullah Bahar College, Dhaka 2019 to 2021

Secondary School Certificate (SSC, Grade 10 equivalent) | Ideal School and College, Dhaka 2019

CERTIFICATIONS

Certified Phishing Prevention Specialist (CPPS)

Certified Red Operations Certificate | Red Team Operations Program