Bishal Biswas

Kolkata, India ✉ bishal692002@gmail.com 📞 9531632450 in bishal2002 ⌂ bishal692002 🔗 Coding Profile

Career Objective

Enthusiastic and curious aspiring software developer with a strong interest in cloud computing and scalable web technologies. Driven by a logical mindset and a passion for solving real-world engineering problems through code. Eager to contribute to agile, cross-functional teams, clarify requirements, and follow industry-standard development practices. Excited to build high-impact, production-ready applications while growing under experienced mentors.

Education

Vellore Institute of Technology, Bhopal   2024-2026
Master of Computer Applications. (CGPA: 9.05 / 10.00)   *Bhopal, Madhya Pradesh*

The Oxford College of Science   2020-2023
Bachelor of Computer Applications. (CGPA: 7.78 / 10.00)   *Bangalore, Karnataka*

Projects

VIT-Bolt – Campus Delivery Platform   *GitHub* ↗

- Engineered a campus-exclusive delivery platform, implementing **geo-fencing** and **domain-restricted authentication** to create a closed, secure ecosystem for all members.
- Expanded the platform beyond food by integrating an **on-campus essentials store**, boosting overall utility by 35% and transforming it into a one-stop solution for daily student needs.
- Optimized an **intelligent order routing system** that streamlined delivery workflows, cutting average delivery times by 40% (from 25 to 15 mins) and measurably improving customer retention.
- Launched a community partnership initiative that created flexible part-time delivery roles, providing a reliable income stream for 10+ local village workers and strengthening community relations.
- **Technologies:** HTML, CSS, JavaScript, Node.js, Express.js, MongoDB, Mongoose, JWT, TailwindCSS, Socket.io.

GameZone Portal – Cloud-Hosted Gaming Hub   *GitHub* ↗

- Orchestrated the deployment of a scalable **Node.js application** on **AWS EC2**, automating server provisioning and deployment with custom **Shell scripts**.
- Fortified the application endpoint by implementing fine-grained firewall rules with **EC2 Security Groups**, isolating the application from unauthorized traffic.
- Architected core **full-stack features**, including a **RESTful API** and dynamic rating system on the back-end, with a responsive vanilla JS front-end to drive user engagement.
- **Technologies:** AWS EC2, Linux (Ubuntu), Shell Scripting, Node.js, HTML, CSS, JavaScript.

Highly Available AWS VPC Setup for Production Workloads   *GitHub* ↗

- Engineered a **highly available AWS architecture** designed for **99.9% uptime** by leveraging a **multi-AZ deployment**, **Application Load Balancer (ALB)**, and **Auto Scaling**.
- Architected a **secure network topology** using a custom **VPC** with **public/private subnets**, **NAT Gateways**, and granular **Route Tables** to isolate resources.
- Secured infrastructure by deploying a **bastion host** and enforcing the **principle of least privilege** with fine-tuned **IAM roles** and **SSH key-based authentication**.
- **Technologies:** AWS (VPC, EC2, ALB, Auto Scaling, NAT Gateway, IAM), AWS CLI.

Tasky – Full-Stack Todo List Manager   *GitHub* ↗

- Engineered a **full-stack MERN** task management application, enforcing a **modular architecture** and adhering to **clean code principles** for maintainability.
- Developed a comprehensive **RESTful API** to handle all **CRUD operations**, ensuring data integrity through robust **server-side validation** with **Zod**.
- Built a dynamic, **high-performance UI** using **React (Vite)** for a responsive user experience, managing the collaborative workflow with **Git**.
- **Technologies:** React, Express.js, MongoDB, Node.js, Zod, Vite, Git.

Technical Skills

Languages: Python, HTML, CSS, JavaScript, Shell Scripting
Web Development: Node.js, Express.js
Cloud & DevOps: AWS (EC2, VPC, S3, IAM, ELB, ASG), Linux/Unix Shell Commands, Ansible, Docker (theoretical)
Databases: MySQL, MongoDB
Developer Tools: Git, GitHub, Postman, VS Code, Google Colab, Jupyter Notebook
CI/CD: GitHub Actions (basic)

Achievements & Certifications

- **AWS Cloud Practitioner Essentials** – AWS Training Certification, Completed June 2025.
- **HackerRank Certifications:** Problem Solving (Basic), Python (Introductory), Software Eng. Intern.
- **Placement Student of the Year (2023)** – Awarded for outstanding performance in campus placements.