

Bishal Biswas

📍 Kolkata, India ✉ bishal692002@gmail.com 📞 9531632450 in bishal2002 🌐 bishal692002 📄 Coding Profile

Career Objective

Enthusiastic software developer with a strong foundation in AWS cloud concepts, infrastructure automation, and configuration management. Skilled in Ansible and currently advancing in Terraform to implement infrastructure as code. Familiar with containerization and database management, while applying prompt engineering techniques to enhance productivity. Eager to contribute to agile teams and grow into a cloud, data engineering, and DevOps professional.

Education

Vellore Institute of Technology, Bhopal <i>Master of Computer Applications. (CGPA: 9.05 / 10.00)</i>	2024-2026 Bhopal, Madhya Pradesh
The Oxford College of Science <i>Bachelor of Computer Applications. (CGPA: 7.78 / 10.00)</i>	2020-2023 Bangalore, Karnataka

Projects

VIT-Bolt – Campus Delivery Platform

[GitHub](#) 

- Built a campus-exclusive delivery platform with **domain-restricted authentication**, creating a secure ecosystem for all members while also generating **local employment opportunities** by engaging village workers as delivery partners.
- 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 workflows, cutting average delivery times by 40% and measurably improving customer retention.
- Containerized the Node.js + MongoDB stack with Docker and Docker Compose**, enabling consistent environments and simplified deployment on AWS EC2 in line with modern DevOps practices and principles.
- Technologies:** HTML, CSS, JavaScript, Node.js, Express.js, MongoDB (Mongoose), JWT, TailwindCSS, Socket.io, Docker.

GameZone Portal – Cloud-Hosted Gaming Hub

[GitHub](#) 

- Built an **interactive gaming hub** featuring organised titles with platform-based filtering, a real-time star rating system, and detailed game information to enhance user engagement.
- Deployed a scalable **Node.js application** on **AWS EC2**, automating server provisioning with custom **Shell scripts**, while enforcing security through fine-grained **EC2 Security Groups**.
- Architected core **full-stack features**, including a RESTful API and responsive vanilla JS front-end; also **leveraged prompt engineering techniques with AI tools** during development to accelerate debugging and feature design.
- 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, while **leveraging prompt engineering techniques with AI tools** to accelerate debugging and documentation.
- 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, Docker, Ansible, Terraform(Upskilling)

Databases: MySQL, MongoDB

Developer Tools: Git, GitHub, Postman, VS Code, Google Colab, Jupyter Notebook

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.