

# Bishal Roy

## SUMMARY

A motivated Computer Science graduate with strong analytical and technical skills, supported by hands-on experience across software development, data analysis, and technical problem-solving. I have worked on a range of projects involving programming, system optimisation, and applied computing, and I am comfortable working with technologies such as Python, SQL, and Linux. With a proactive mindset and a strong foundation in computer science principles, I am eager to contribute to innovative teams, continuously develop my technical expertise, and deliver reliable, high-quality solutions in a professional environment.

## EXPERIENCE

### Database Support Consultant 08/2025 to Current

#### Pro DBA Ltd, Edinburgh

- Provide first-line support for SQL Server and Oracle databases, troubleshooting query errors, performance issues, and connectivity problems to minimise downtime
- Monitor system performance, identify risks, and escalate complex cases to senior DBAs with clear documentation
- Use SQL queries and scripts to investigate issues, validate fixes, and analyse data
- Apply ITIL processes to manage incidents and service requests, ensuring structured and efficient workflows
- Communicate solutions effectively to non-technical stakeholders and contribute to internal documentation to support knowledge sharing

### Customer Service Assistant 11/2023 to 08/2025

#### BP, Edinburgh

- Resolved customer issues efficiently, improving satisfaction and retention
- Trained and mentored new staff, contributing to smooth operations and teamwork

### AI / Computer Vision Intern 06/2025 to 08/2025

#### Gamestack.app, Edinburgh

- Developed a prototype object detection model using transfer learning with pre-trained architectures
- Applied Python, OpenCV, and YOLO for experimentation, evaluation, and performance testing
- Collaborated with the team to document findings and recommend improvements for future model iterations

## PROJECTS

### Note-Taking Recommendation System, Heriot-Watt University Dissertation

- Developed a note-taking application with a recommendation system using machine learning, which personalises learning materials based on users' notes using an NLP API. The system suggests relevant study materials based on their notes, enhancing the learning experience

### Gita AI Chatbot, Python, NLP, FAISS, LLM

- Built an intelligent chatbot for querying and understanding Bhagavad Gita verses using semantic search, and implemented vector embeddings and FAISS indexing for fast, accurate information retrieval
- Designed a retrieval-based NLP pipeline for context-aware question answering, and optimised similarity search performance and response relevance

- SKILLS**
- Programming & Development**
    - Python, JavaScript, React Native (Mobile Development), C#, HTML/CSS, PHP, Java
  - Database**
    - SQL Server, MySQL, Oracle, Firebase
  - Cybersecurity**
    - Security Frameworks, Network Fundamentals, Incident Response, Risk Assessment, Linux Commands
  - Game Development**
    - C# (Unity), Object-Oriented Programming (OOP), Game Logic & State Management, Animation Systems, AI Behaviour
  - Professional Skills**
    - Analytical Thinking, Problem Solving, Communication, Team Collaboration, Stakeholder Support, Documentation, Adaptability, Creative, Committed
  - Tools & Platforms**
    - Git, Linux, Visual Studio Code, Visual Studio, Unity, Putty, SQL Server Management Studio
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- FURTHER CERTIFICATION**
- Google Coursera**
    - Cybersecurity Certificate (Non-Credit)**, Completed 01/2025
      - Security Operations & Incident Response
      - SIEM Concepts & Log Analysis
      - Threat Intelligence & Indicators of Compromise
      - Risk Assessment & Security Frameworks
      - Network Security & Hardening
      - Vulnerability Identification & Remediation
      - Linux Security & Command-Line Investigation
    - AWS Certified Cloud Practitioner** – In Progress (Expected 2026)
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- EDUCATION**
- Heriot-Watt University, Edinburgh**
    - Computer Science (Artificial Intelligence)**, 09/2021 – 06/2025
      - **Grade:** 2.1/ Upper Second Class (Achieved)
      - **Relevant Modules:** Industrial Programming, Data Mining and Machine Learning, Industrial Robotics, Artificial Intelligence, Software Engineering, and Computer Games Programming
      - **Societies:** Member of Robotics, and Computer Science, Futsal, Football, Dance, Volleyball
    - Google Coursera**
      - Cybersecurity Certificate (Non-Credit)**
        - **Covered:** Security operations, System vulnerabilities, Data protection, Access management, and Threat response.
    - St Augustine's RC High School, Edinburgh**
      - **Scottish Highers:** Mathematics (B), Spanish (B), Physics (B), English (A), and Computing Science (A)
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- WEBSITES**
- Portfolio:** <https://broy9501.github.io/Portfolio-Website/>
  - GitHub:** <https://github.com/broy9501>
  - LinkedIn:** <https://www.linkedin.com/in/bishal-roy-391924268/>