ANKIT KUMAR

Cottbus, Germany | ankittkumarr702@gmail.com | linkedin.com/in/ankit-kumar| Portfolio: ankitkumarbyte

Python Developer and AI/ML Engineer with experience building data-driven and machine learning applications. Skilled in Python, PyTorch, and scikit-learn, with practical experience in model development, experimentation, and evaluation. Hands-on exposure to explainable AI, computer vision, and NLP, with a strong focus on writing clean, efficient, and reproducible code for real-world ML systems.

EDUCATION

M.Sc. in Artificial Intelligence | Brandenburg University of Technology Cottbus | Germany   10/2025 – Present

Relevant Coursework: Artificial Intelligence, Learning in real and virtual humans, Explainable Machine Learning, Practical Lab (Braitenberg Vehicles)

B.Tech. in Computer Science | M.S. Ramaiah University of Applied Sciences | Bengaluru, India   11/2021 – 06/2025

Projects: Explainable AI for Network Intrusion Detection, IntelliCalc – AI-Powered Calculator

EXPERIENCE

AI Researcher | Coding Jr | Bengaluru, India   11/2024 – 03/2025
- Conducted applied research on machine learning models and system architectures for AI copilots ~50%.
- Investigated and developed scalable ML components and Python-based backend services.
- Translated research prototypes into reliable, deployable AI systems.

Game Developer |Unity |Bengaluru, India   02/2025 – 03/2025
- Built a cross-platform 2D game with **AI-driven enemy behavior** and physics-based mechanics
- Implemented procedural gameplay logic, increasing replayability by ~40%
- Optimized mobile performance, reducing memory usage by ~25%

Associate Software Developer | Relu Consultancy | Bengaluru, India   05/2024 – 07/2024
- Built Python-based scraping pipelines processing 100K+ records/day
- Implemented headless automation and anti-bot strategies, improving success rate by ~50%
- Delivered structured datasets for ML pipelines, cutting preprocessing time by ~40%

SKILLS

Programming Languages:	Python, JavaScript, Java, MATLAB, HTML, CSS,Linux
Libraries & Frameworks:	PyTorch, scikit-learn, NumPy, Pandas, SciPy, Hugging Face Transformers,
Backend & ML APIs / MLOps & Deployment:	OpenCV, MediaPipe, Pygame, FFmpeg,AWS SageMaker ,FastAPI, REST APIs, OpenAPI (Swagger), Docker, Git, GitHub, Vim.
Databases & Data Engineering:	SQL, MySQL
Data Visualization & Analysis:	Matplotlib, Seaborn, Jupyter Notebook
Networking,Other:	API Integration, CI/CD, Agile Methodologies,TCP/IP basics, IDS datasets

PROJECTS | GITHUB

ZeroTouch – Virtual Mouse: Python, Computer Vision, OpenCV, Real-Time Gesture Recognition, Hand Tracking
Motion Surfer – Human Motion Analysis: Python, Computer Vision, Video Processing, Motion Tracking
E-XAI – Explainable AI for Intrusion Detection: Python, Machine Learning, Explainable AI, LIME, SHAP, Deep Learning, Cybersecurity, CIC-IDS-2017, NSL-KDD, SIMARGL2021
IntelliCalc – AI-Powered Calculator: Python, FlaskAPI, CNN, Deep learning ,Modular REST API,Symbolic AI, CV, NLP
SkillPulse AI – Job Matching Platform:AI, NLP, Recommendation Systems,K-Means ,Frontend development**.**

PUBLICATIONS

IntelliCalc: AI-Powered Cross-Platform Calculator — AIR 2025,
E-XAI: Explainable AI for Network Intrusion Detection — ICDSA 2025