

## AYUSHI SINGH

Stamp 1G | Limerick, Ireland | +353 830940986 | sayushi206@gmail.com | LinkedIn: ayushi-singh-9b8940189

### PROFESSIONAL SUMMARY

Graduate in Artificial Intelligence and Computer Science with strong foundations in engineering, data-driven problem solving, and cloud technologies. Experienced in applying automation, analytics, and scalable solutions to real-world challenges through collaborative, cross-functional projects. Passionate about innovation, continuous learning, and contributing to healthcare transformation by combining technical expertise with a strong commitment to teamwork and operational excellence.

### EDUCATION

#### Master of Science in Artificial Intelligence and Machine Learning

University of Limerick, Ireland | Sep 2023 - Aug 2024 || Second Class Honours, Grade I

Relevant modules: Data Engineering and Machine Learning, Machine Vision, AI for Games, Evolutionary

Computation and Humanoid Robotics, Advanced AI Ecosystems, Probabilistic and Explainable AI, Deep Reinforcement Learning

#### Bachelor of Technology in Computer Science and Engineering

Dr. A.P.J Abdul Kalam Technical University | Jul 2019 - Jun 2023 || First Division with Distinction

Relevant modules: Cloud Computing, Database Management Systems, Data Mining, Python, Data Structures and

Algorithms, Computer Architecture, Compiler Design, Operating Systems, Cryptography, Computer Networks, Big Data, Machine Learning

### TECHNICAL SKILLS

**Languages:** Python, OOP, Data Structures & Algorithms

**Cloud/DevOps:** AWS (SageMaker, Lambda, CloudWatch, API Gateway, IAM, S3, EC2), Git, CI/CD

**Frameworks/Tools:** NumPy, Pandas, Scikit-learn, OpenCV, NLTK, Apache Spark, Hadoop, CARLA Simulator

**Concepts:** ML Pipelines, NLP, Computer Vision, Agile, SaaS environment

### WORK EXPERIENCE

**Artificial Intelligence Intern & Machine Learning** | Vimal Daga Informatics Pvt. Ltd. | April 2023 - September 2023

- Developed a real-time sign detection system using deep learning showcased problem-solving and innovation.
- Built predictive models to analyse trends, Optimized models, reducing computational cost by 15% and improving accuracy by 20%.
- Actively collaborated with peers, demonstrating communication and teamwork.
- Applied supervised and unsupervised learning techniques for regression and clustering.

**Python Programming Intern** | Intershala | May 2022 – July 2022

- Automated data processing tasks, reducing manual effort by 30%.
- Analysed datasets using Python libraries.
- Delivered data-driven insights through visualization and analysis.

### PROJECTS

#### Sensor Fusion for Autonomous Vehicles (Dissertation)

- Developed and evaluated sensor fusion techniques (LiDAR, radar, cameras) using CARLA Simulator for enhanced autonomous vehicle safety.
- Demonstrated increased vehicle perception and decision-making accuracy in complex conditions.
- Conducted experiments with multiple sensor setups to improve obstacle detection and navigation.

#### Research Paper: Motion Planning and Bipedal Walking in Humanoid Robots

- Analysed AI algorithms for gait planning, sensor integration, and stable walking behaviours in humanoid robots
- Integrated sensors for real-time balance adjustments.
- Optimized for hardware compatibility and performance along with Evaluating stability under dynamic conditions.

#### Smart Resume Analyzer (Project Leader)

- Developed an NLP-powered resume analysis tool using Python.
- Deployed tool for real-time, data-driven resume feedback.
- Enhanced scoring accuracy by 30% through optimized algorithms.

#### Scaling Sentiment Analysis Using AWS SageMaker

- Developed scalable sentiment analysis using AWS SageMaker, Lambda, CloudWatch, and API Gateway.
- Built and deployed machine learning models for sentiment classification.
- Managed data preprocessing, model training, and scalable API endpoints.

### CERTIFICATIONS

- AWS Academy Graduate – Cloud Foundations | Apr 2024
- Python Programming – IIT Kanpur | May 2022
- Machine Learning – AWS Skill Builder | Apr–Jun 2024

### STRENGTHS

- Agile collaboration and cross-functional teamwork
- Strong communication and presentation skills
- Detail-oriented, curious, and eager to learn new technologies
- Proactive problem solver in dynamic environments