# Varun Anand

Co. Dublin, Ireland | vanand@tcd.ie | +353 894 831 889 | Website | LinkedIn | GitHub

## **EDUCATION**

# Trinity College Dublin

Dublin, Ireland

B.A. Moderatorship Honors in Computer Science

Expected Graduation: Sep 2025

#### EXPERIENCE

#### **Dell Technologies**

Dublin, Ireland

Student Software Engineer

Jan 2023 - May 2023

- Developed a custom NER model using SpaCy and Flair, processing over 10,000 Dell support logs to identify 11 entity types with 92% accuracy.
- Automated support query categorization, reducing manual processing time by 33% and enhancing customer support efficiency.
- Collaborated with a cross-functional team of 10 members across 4 Agile sprints, utilizing GitHub and Jira for task management and implementing CI/CD pipelines.

#### Liferay International

Dublin, Ireland

Student Software Engineer

Jan 2024 - May 2024

- Designed and developed a Student Job Portal using SpringMVC, Liferay DXP, and JavaScript, streamlining recruitment for over 50 companies and reducing average recruitment time by 25%.
- Led a Front-End Development Team of 4 members, creating 15 responsive UI/UX components and mentoring junior developers in best practices within an Agile framework.
- Delivered scalable and maintainable solutions, ensuring 99.9% system uptime and accommodating a user base growth of 150%.

#### PROJECTS

Dynamic Flight Pricing Engine | Python (Flask), React.js, PostgreSQL, scikit-learn, Docker | Sep 2024 - Present

- Designed and implemented a dynamic pricing engine to optimize Ryanair flight ticket prices in real-time based on demand, booking trends, and competitor pricing, resulting in a 10% increase in revenue.
- Built RESTful APIs using Flask to fetch and process historical data from PostgreSQL and simulate real-time bookings, handling up to 1,000 requests per minute.
- Developed predictive pricing models using Linear Regression and Decision Trees, achieving 95% accuracy by analyzing features including days to departure, booking trends, competitor prices, and seasonal demand.

#### Pedestrian Crossing Analysis System | C++, OpenCV

Sep 2024 – Nov 2024

- Developed a system to automatically analyze over 1,000 images of pedestrian crossings from a car's perspective, handling varying lighting and environmental conditions with 90% accuracy.
- Applied advanced computer vision techniques, including region-based processing and edge detection, to locate and evaluate pedestrian crossings in static images, improving detection speed by 30%.
- Tested performance across 100+ datasets, providing metrics and analyzing robustness and failure cases.

#### TECHNICAL SKILLS

**Programming Languages:** Python, Java, C++, SQL, PHP, JavaScript

Data Processing & Machine Learning: Pandas, NumPy, Deep Learning (TensorFlow, spaCy), scikit-learn

Software Development: Distributed Systems, REST API Design, Microservices, SDLC, Agile (Scrum), CI/CD

Cloud & DevOps: AWS (Certified Cloud Practitioner), Docker, Kubernetes, Git, Jira, Monitoring & Alerting Solutions

Database Systems: MySQL, PostgreSQL, Oracle

Frameworks & Tools: ReactJS, NodeJS, Spring Boot, GraphQL, JUnit, Flask, Liferay DXP

**Testing**: Unit Testing, Integration Testing, Load & Performance Testing

### CERTIFICATIONS

#### **Amazon Web Services**

Dublin, Ireland

AWS Certified Cloud Practitioner | View Certificate

Dec 2024 - Present

Amazon Web Services

Dublin, Ireland

AWS Certified Solutions Architect - Associate

Est. Completion: Feb 2025