

## Contact

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(LinkedIn)

## Top Skills

Deep Learning  
Computer Vision  
Natural Language Processing

## Languages

English (Native or Bilingual)  
Hindi (Native or Bilingual)  
Chinese (Elementary)

## Certifications

Structuring Machine Learning  
Projects  
Neural Networks and Deep Learning  
A1 Level in Mandarin  
Improving Deep Neural Networks:  
Hyperparameter tuning,  
Regularization and Optimization

## Honors-Awards

Best MT Project Award  
Analyst of the Quarter Q1-2021  
SVP Star of the Quarter Q2-2021  
Analyst of The Quarter Q4-2021  
American Express Analyze This

## Publications

A Novel Information Theoretic Cost  
Measure for Filtering Based Feature  
Selection from Hyperspectral Images

# Agastya Raj

Researcher  
Dublin, County Dublin, Ireland

## Summary

Researching intelligent systems in optical networks. Previously worked as a Fraud Risk Analyst at American Express for 3 years. Graduated with a Bachelor's in Materials Engineering from IIT Roorkee in 2019.

## Experience

CONNECT Centre  
Researcher  
April 2022 - Present (3 years 3 months)  
Dublin, County Dublin, Ireland

American Express  
2 years 11 months  
Assistant Manager - Credit and Fraud Risk  
November 2021 - April 2022 (6 months)

Risk Analyst - Credit and Fraud Risk  
June 2019 - October 2021 (2 years 5 months)  
Gurgaon, India

- Responsible for managing new accounts fraud controls for American Express products in US market
- Developed machine learning based modeling solutions to identify fraudulent credit card applications attempted by lost or stolen identity
- In charge of leading innovation and development in modeling techniques to prevent fraudulent applications
- Found loopholes in the system and then assessed its potential strength and implemented controls so that the vulnerability of the system can be minimized

MathLogic  
ML Research Intern  
May 2018 - July 2018 (3 months)  
Gurgaon, India

- Built attention based sequential learning solutions for time series data, improving existing performance by a significant margin.
- Implemented and optimised Sequence to Sequence architectures and built a custom pipeline to experiment and develop end to end machine translation tasks in Pytorch.
- Experimented with the use of Generative Adversarial Networks in semi-supervised learning, and improved the training of classifiers with insufficient data.

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## Education

Trinity College Dublin

Doctor of Philosophy - PhD, Computer Science · (March 2022 - March 2026)

Indian Institute of Technology, Roorkee

Bachelor of Technology, Metallurgical and Materials

Engineering · (2015 - 2019)