

# Gaurav Kaila | Data Science Manager

## Profile

Data Science Manager with experience in developing production ready machine learning systems and expertise in creating data-driven solutions. Successfully demonstrated leadership and creative thinking skills which enable me to deliver immediate strategic value. My key strengths include:

- Python
- TensorFlow
- Machine Learning
- Agile
- Project Management
- Cloud
- Leadership
- Communication

## Professional Experience

**Data Science Manager at EY, Ireland** September 2018 - present

- Lead client engagements in the domain of computer vision and machine learning
- Help clients achieve process improvement through artificial intelligence and analytics
- Mentor data scientists and lead initiatives to excel EY on the innovation roadmap
- **Automating visual quality control - large US utility client serving 4.5M customers**
  - Lead a team of data scientists and software engineers to design and develop an end-to-end machine learning assisted computer vision solution to automate visual quality control
  - My work increased the visibility of the visual inspection process from 5% to 100%, leading to large cost savings for the client
- **Machine Learning Study Group**
  - Mentored the machine learning study group for consultants in EY and delivered lectures on machine learning
  - Started EY Ireland's first technology publication on Medium

**Chief Data Scientist/Co-founder at [IdeaChain.io](http://IdeaChain.io)** February 2019 - present

- IdeaChain is an online innovation collaboration platform for innovators
- Responsible for data science strategies and vision
- Designed and implemented core modules for intelligent understanding of natural language

**AI and Analytics Senior Analyst at Accenture, Ireland** September 2016 - August 2018

- Design and build end-to-end data analytics pipelines using real-world data
- Build and deploy production ready machine learning models
- Deliver critical insights from machine learning results and mentor junior analysts
- Recent projects and their impact:
  - **Identity and Access Management**
    - Lead the development and deployment of a recommendation system for improving identity and access management using Apache Spark
    - **Impact:** This solution currently automating assignment of privileged access to applications and resources to their employees based on their user profile leading to fewer privacy breaches and greater data protection
  - **Automated Visual Inspection**
    - Implemented and deployed deep learning based automated QA system for identifying defects on car seats for a large multinational car seat manufacturer
    - **Impact:** Reduced QA time per seat from 40 seconds to 5 seconds leading to large efficiency gains
    - This solution is currently being used in over 100 industrial plants all over the world

**Computer Vision Researcher at Trinity College, Ireland** March 2016 - September 2016

- Part of the imaging team of a 3M Euro European Research Council (ERC) project
- Developed vision algorithms and mathematical models for identifying plaque in coronary arteries

## Independent Work

- Freelance developer and consultant, Upwork.com, Ireland** February 2016 - Present
- Freelance work via Upwork.com in the field of computer vision and machine learning
  - Recent projects and their impact:
    - **Automated Crop Disease Classification**
      - Built and deployed an automated image classification system for identifying tomato crop diseases.
      - **Impact:** My solution is enabling farmers in rural India to provide better and cost-effective treatment to their crops by early identification of diseases

## Education

- MSc (Research) (Honors) in Biomedical Engineering** 2013 - 2015  
Delft University of Technology, The Netherlands
- CGPA: 7.32/10
  - Won the Delft Research Initiative (Health) Scholarship
  - Successfully completed MSc degree, honors project, internship and master thesis in 22 months (average is 28 months)
  - Developed a clinical imaging software application to aid coronary intervention using Python

- B.E. in Biomedical Engineering** 2009 - 2013  
Manipal University, Manipal, India

- CGPA: 9.16/10
- Ranked in top 1% of my graduating class
- One of the few students to be selected at a national level for an IAESTE international exchange program
- Managed several teams of 5 - 20 people during TEDx and other cultural/technical events

## Projects/Internships

- Regulatory Affairs Intern, Meddrop GmbH, Germany** July 2015 - September 2015
- Researcher, Leiden University Medical Center, The Netherlands** November 2014-June 2015
- Research Intern, Indian Institute of Technology, India** December 2012 - May 2013
- International Exchange, Ankara University, Turkey** December 2011-January 2012

## Scholarships and Certifications

- AWS Solutions Architect - Associate, Amazon Web Services** 2018 - 2020
- Irish Research Council Postgraduate Scholarship** 2016
- NGS Scholarship, National University of Singapore** 2015
- Delft Research Initiative (Health) Scholarship** 2013 - 2015

## Core Skills

- Python
- R
- Apache Spark
- MATLAB
- Tableau
- Linux
- Hadoop
- Leadership
- Machine Learning
- Docker/Microservices
- AWS
- Communication
- SQL
- TensorFlow
- Scikit-learn
- Agile