# Jishnu Prakash Kunnanath Poduvattil

Liverpool, UK (Open to Relocate, Visa Status- Eligible for 2 years Graduate Visa)

+44 7824049126 | linkedin.com/jishnuprakashkp/ | My Portfolio

# Summary

I am a seasoned Data scientist and machine learning enthusiast with strong interpersonal, mathematical, and analytical skills and 3.5 years industry experience. Proficiency in identifying and mapping business challenges to solutions using Machine learning algorithms. Hands-on experience in planning, conducting, and implementing end to end data science projects. Actively looking for companies with strong vision and leadership, where I can best utilise, my skill set and advance my career.

# **Technical Skills**

| Languages: Python, R, SQL, HTML   | Databases: MySQL, MongoDB | Others: Git, Jira, Docker, AWS, GCP |
|---|---------------------------|-------------------------------------|
| <b>Libraries</b> : TensorFlow, PyTorch, Scikit-learn, NumPy, Pandas, Streamlit, Plotly, Matplotlib, NLTK, Spacy |                           |                                     |

- Design, Develop, Deploy and Manage machine learning, computer vision and NLP models
- Perform statistical analysis, hypothesis testing and experimentation on unstructured datasets
- Producing sophisticated dashboards, reports using R and Python summarising business insights
- Effective communication with international clients and team members

# Experience

### Summer Intern | Virtual Engineering Centre (VEC)- Liverpool, UK

Jun 2022 to Sep 2022

- Developed a research mapping tool for the commercial team at VEC to learn trends of academic research and secure funding.
- Built the tool from scratch, scraping data from research platforms via multiple rest API's, applying NLP techniques like LDA Topic modelling, Transformer models, Sentence-BERT embeddings, n-grams, Semantic similarity and deploying it using Streamlit dashboard.
- Designed and implemented an object detection training pipeline for detecting small and moving objects from Wide area motion imagery simulations and replaced it with existing traditional method of background subtraction resulting in efficient detection of vehicles.

### Junior data scientist | IMMO Information Technology (IAZI/CIFI)- Kochi, India Apr 2019 to Aug 2021

- Refined user time spent to post a real-estate Ad from 5 minutes to under 1 minute by replacing text to picture
  input using reverse image search and deep learning.
- Introduced quality variables in hedonic models for property appraisals by mapping appliances in real-estate properties to marketplace using object detection.
- Generated new revenue stream by replacing google services with custom computer vision models.
- Tailored an NLP pipeline to extract information from Ad descriptions and fill missing information by 15-20%. This increased quality of our products.
- Well versed in analysing and generating reports on market, transaction, finance, and carbon emission datasets used for quarterly productions of hedonic models.

#### **Energy engineer | Namdhari Eco Energies- Greater Noida, India**

Jun 2018 to Mar 2019

- Identified energy wastage, analysing energy data collected from industries and proposed solutions to save 10-15% of energy bills over 25 Industrial units.
- Generated interactive reports for clients to interpret energy loss and power distribution.
- Built python framework to automate report generation and data visualisation, that eliminated 1 to 2 weeks of manual work.

# Education

#### University of Liverpool - MSc in Data Science and Artificial Intelligence

Sep 2021 to Sep 2022

- Distinction (Sem 1 and 2)
- Mastered fundamentals of SOTA algorithms in machine learning and data science.
- MSc Project on detecting vehicles in WAMI of 5KM altitude using YOLOV3, Faster-RCNN object detection.
- Relevant modules: Data mining & Visualisation, Machine learning & Bio-inspired optimisation, Computational Intelligence, Applied AI, Database Management & Information Systems, Maths for Data science and AI, Programming fundamentals, Research methods in computer science.

#### University of Calicut - B. Tech in Electrical and Electronics Engineering

June 2014 to May 2018

- CGPA 7.27/10, First class.
- Final year project on Anti-Theft Smart Energy Meter using Internet of Things for analysing energy usage
- Founded IEEE Student branch with initial membership count of 12, then raised to 165 in a year by establishing strong leadership, organising, management and communication skills.
- Planned and conducted 100+ technical and professional events during my tenure as Chairperson (2015-17).

# **Technical Projects**

Computer Vision: -

- Detecting Vehicles from WAMI Simulation of an urban area from an altitude of 5 KM (MSc Project)
- Medical Image classification- Infected cells detection, covid detection and so on.

Natural Language Processing: -

- ECTHR GLUE Text classification using Transformer models and Entity extractions
- Sarcasm detectors, Personal statement generation

ML algorithms from Scratch: -

- Perceptron, K-Nearest Neighbours
- K-means & Agglomerative clustering

# Leadership & Management

#### Course representative | University of Liverpool

Oct 2021 to Aug 2022

Assess student experience and teaching quality, reporting feedback and suggestions from students and present in staff student liaison committee.

# Secretary | IEEE Kerala young professionals

Jan 2020 to Dec 2020

- Reached out to business/technology institutes and SMEs for collaborations, knowledge sharing and networking with young professionals' community.
- Organised, implemented, and reported 52 State/National technical, social, and professional events of young professionals in Kerala section.

#### Technical coordinator | Student leadership team, IEEE Kerala section

Jan 2017 to Dec 2017

- Ensured that each members receives the technical benefits of the community.
- Represented 92 student branches, conducted 15 national level technical events for student engineers, and ensured adequate utilisation of technical resources from IEEE.

#### **Awards**

#### Outstanding student volunteer award | IEEE Malabar subsection

2017

For my contributions as a student volunteer from 2015 and leading a team of 5 as Student representative of Malabar subsection (2016). Represented 21 student branches, incorporated an effective communication chain between the student chairs and the section. Identified and resolved challenges faced at branch level and so on.