Karthik Puranik

Indian Institute of Information Technology Tiruchirappalli, Tamil Nadu, India karthikp18c@iiitt.ac.in | +91 8762263279 | https://www.linkedin.com/in/karthikpuranik/

EDUCATION

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY TIRUCHIRAPPALLI

B.Tech (CSE) | 2018-22 | CGPA: 8.3

DCFL PU COLLEGE

Bengaluru, Karnataka PCMCs | Passed 2018 | 91.33%

SDM CENTRAL SCHOOL

Dharwad, Karnataka Schooling (CBSE) | Passed 2016 | CGPA: 10

SKILLS

TECHNICAL SKILLS

COMPETENCIES

• Machine Learning • Deep learning • Natural Language Processing • Machine Translation • Data Analysis

Frameworks

- Tensorflow Keras PyTorch Huggingface Transformers Scikit-Learn
- NumPy Pandas Matplotlib •
 Seaborn

Platforms

• Anaconda distributions • Google Colab

Programming Languages

• Python • C • LaTeX

Database Technology

• MySQL

COURSES

CORE COURSES

Database Management System Data Structures and Algorithms Operating Systems Software Engineering

Jortware Engineering

Machine Learning

Data Warehousing and Data Mining Probability

Mathematics

Queuing and Statistics

CERTIFICATIONS

- Python For Everybody Specialization, University of Michigan
- Neural Networks and Deep Learning, deeplearning.ai
- Applied Data Science with Python Specialization, University of Michigan
- Tensorflow in Practice Specialization, deeplearning.ai

WORK FXPERIENCE

CRIMSON INTERACTIVE (ENAGO)

INFORMATION TECHNOLOGY ML Engineer Intern | May 2021 - June 2021

- Worked on Machine Translation for Indian languages to produce exceptional BLEU scores.
- Trained **fairseq** models on the Samanantar dataset after removing noise, and also worked with the **SimAlign** tool to produce word alignments for translation.
- Worked on various multilingual pre-trained models for the same task and analyzed the scores.

INDIAN INSTITUTE OF TECHNOLOGY BHU(VARNASI)

Research Intern | Dec 2020 - current

- Research and development of **Topological Relations between Spatial Objects** under Dr. Sukhada.
- Tried to improve the translations produced by Language Communicator, a translation tool by IIT BHU, using masked language models (MLM) in transformers like BERT and t5.
- Worked on a research paper in **Spatial topological relations in Hindi** by analyzing responses from various native and non-native speakers.

INDIAN INSTITUTE OF MANAGEMENT INDORE

Research Content Writer Intern | Jan - Feb 2021 | May - June 2021

- Research and writing case studies on an upcoming company in the telemedicine industry under Dr. Saurabh Kumar.
- Analyzing and formulating ideas for an IoT based company to recover from the losses incurred due to COVID-19 and recording the same.

THE SPARKS FOUNDATION

Data Science and Business Analytics Intern | Dec 2020 - Jan 2021

• Worked on various **supervised and unsupervised Machine Learning algorithms** to solve real-time problems and analyzing the results.

GOALS101

Technical Writer | June 2020 - Aug 2020

- Worked as a technical writer in this AI-based Transaction Behavioral Intelligence (TBI) company that provides solutions to the banking industry.
- Introduced to Big Data and the real-time use of ML and Al in the industry.

PUBLICATIONS

• There is always Hope in Transformers

(Link)

• Attentive fine-tuning of Transformers for Translation of low-resourced languages

(Link)

- Offensive Language Identification in Low-resourced Code-mixed Dravidian languages using Pseudo-labeling (Link)
- Evaluating Pretrained Transformer-based Models for COVID-19 Fake News Detection (Link)
- Domain Identification of Scientific Articles using Transfer Learning and

Ensembles (Link)
• Transfer Learning for Offensive Language Detection in Dravidian Languages

ACHIEVEMENTS

(Link)

- Top 1% in KCET 2018 and top 2% in JEE Mains 2018.
- Rated 5* in Python and Problem Solving in Hackerrank.
- Two time Karnataka Talent Search Examination (KTSE) top 10.
- Top performance in Kaggle competitions and Flipr 7.0 hackathon.