

ADEEP HANDE

Udupi, Karnataka-576213, India

🏠 <https://adeeph.github.io/>

✉ adeeph18c@iiitt.ac.in

🌐 [linkedin.com/in/Adeep](https://www.linkedin.com/in/Adeep)

🐙 github.com/Adeep

Education

IIIT TIRUCHIRAPPALLI

Aug. 2018 – May 2022 (Expected)

Bachelor of Technology in Computer Science, CGPA = 8.1/10.0

Tiruchirappalli, TN

Featured Coursework: Deep Learning, Natural Language Processing, Cloud Computing, Software Engineering.

EXPERIENCE

Tata Communications (Corporate Strategy – Innovations)

November 2021 – Present

Data Scientist Intern

Bengaluru, India

- Creating an AI-powered real-time Fraud Prevention as a Service (FPaaS) engine based on hundreds of millions of call logs obtained from pre-existing rules-based algorithms.

Insight SFI Research Centre for Data Analytics

July 2020 – Present

Research Intern

Galway, Ireland

- Developed a Multi-task Learning framework for Sentiment Analysis and Offensive Language Identification in Dravidian Languages.
- Constructed Code-Mixed Datasets scraped from YouTube for Kannada-English language.

Raaga Products Pvt Ltd

May 2021 – July 2021

Research Intern

Bengaluru, KA

- Worked on the project *Anomaly Detection using transformer-based GAN*.
- Proposed a novel method to detect anomalies in Diabetic Retinopathic images using adversarial learning.

Raaga Products Pvt Ltd

July 2020 – Oct 2020

Machine Learning Intern

Bengaluru, KA

- Worked on the project *A semi-supervised approach for detecting Diabetic Retinopathy*.
- Generated labels for another dataset by using semi-supervised approaches to tackle the lack of datasets

PUBLICATIONS ¹

Are Class Vectors good Meta-learners? A Preliminary study on low-resourced Languages

Under review at the Association of Computational Linguistics, ACL 2022

Modeling Homophobia and Transphobia detection using Data-Augmentation in a Multilingual Code-mixing Setting

Under review at the Association of Computational Linguistics, ACL 2022

Offensive Language Identification in Low-resourced Code-mixed Dravidian languages using Pseudo-labeling

Under review in the Computer Speech and Language Journal

[Preprint]

Benchmarking Multi-Task Learning for Sentiment Analysis and Offensive Language Identification in Under-resourced Dravidian Languages

Under review in the Soft Computing Journal

[Preprint]

Findings of the Sentiment Analysis of Dravidian Languages in Code-Mixed Text

Accepted at the Forum for Information Retrieval, FIRE 2021

[Preprint]

Do Images really do the Talking? Analysing the significance of Images in Tamil Troll meme classification

Accepted in the Advances in Computational Intelligence Journal

[Preprint]

Hope Speech detection in under-resourced Kannada language

Under review in the Pattern Recognition Letters Journal

[Preprint]

KanCMD: Kannada CodeMixed Dataset for Sentiment Analysis and Offensive Language

[Paper]

Attentive Fine-tuning of Transformers for Translation of low-resourced languages

[Paper]

¹[Google Scholar](#)

Leveraging Pretrained Language Models for Multilingual Protest Detection	[Paper]
Domain Identification of Scientific Articles using Transfer Learning and Ensembles	[Paper]
Tamil Troll Meme Classification: You need to Pay more Attention	[Paper]
Transfer Learning for Offensive Language Detection in Dravidian Languages	[Paper]
Hope Speech Detection: There is always hope in Transformers	[Paper]
Evaluating Pretrained Transformer-based Models for COVID-19 Fake News Detection	[Paper]

Technical Skills

Languages: Python, Java, C, Julia, JavaScript, SQL

Developer Tools: Pycharm, VS Code, AWS, Google Cloud Platform, Android Studio, L^AT_EX

Technologies/Frameworks: Linux, GitHub, GitLab

PROJECTS

English to Irish & Marathi Translation System [code] <i>Python, AWS Sagemaker</i>	May 2021 - July 2021
<ul style="list-style-type: none"> Fine-tuned IndicTrans, the largest language model available at the time, on Samanantar Dataset. The model was fine-tuned on the training data a parallel Bible corpus for Marathi. The parallel bible parallel corpus from a previous task (MultiIndicMT task in WAT 2020) was used. 	
Multi-task Learning for Auxiliary tasks [code] <i>Python, Pycharm, low-resourced languages</i>	Oct 2020 - Jun 2021
<ul style="list-style-type: none"> Developed Multi-task learning frameworks to address the lack of annotated data for low-resourced languages Experimented with several loss functions and benchmarked the models on the datasets of three low-resourced languages. 	
Dual Channel Language Model [code] <i>Python, Text Classification</i>	Dec 2020 - May 2021
<ul style="list-style-type: none"> Constructed a corpus consisting of 7K comments for sequence classification. The dataset crossed 5,000 downloads on Huggingface datasets library Utilised parallel translations of the code-mixed texts to English by Google Translate API. 	

[\[Dataset\]](#)

ACADEMIC AWARDS AND ACHIEVEMENTS

- Recipient of the Udacity AWS Machine Learning Scholarship 2021
- Selected to attend the 11th Lisbon Machine Learning Summer School of 2021, at Instituto Superior Técnico (IST), Portugal.
- Offered Summer Internship at the School of AI and Data Science, IIT Jodhpur.
- 1st rank in the shared task on MT systems for COVID-related texts at the Technologies for MT of Low Resource Languages, LoResMT at MT Summit 2021 (out of 150 submissions).
- Selected to attend the FAcCT AI Winter School 2020 at IIT Kharagpur
- Ranked in the top 1% (174/18000+ teams) at Janataka Hack Independence Day Hackathon.

POSITIONS OF RESPONSIBILITY

Organizer & Reviewer	Spring 2021 – Present
<i>Multiple Venues</i>	<i>IIIT Trichy</i>
<ul style="list-style-type: none"> Program Committee (PC) member for two workshops of DravidianLangTech and LT-EDI at the European Chapter of Computational Linguists (EACL) 2021. Jointly Organizing a shared task on Sentiment Analysis in Dravidian languages (DravidianCodeMix) at FIRE 2021. Reviewed 2 manuscripts for Springer Nature's SN Computer Science Journal Organizing committee member for <i>Choose to Challenge - Together We Can</i>, a 5-day national workshop at IIIT Tiruchirappalli. 	
Training and Placement Cell	Spring 2020 – Present
<i>Coordinator</i>	<i>IIIT Trichy</i>
<ul style="list-style-type: none"> Assisted in conducting successful placement drives across all departments of the university. Managed a team of 5 members and ran biweekly meetings to oversee progress in essential parts of contacting recruiters Conducted several pre-placement drives and mock exams to acquaint the students for placements. 	
Aikyam	Spring 2020 – Present
<i>Co-editor</i>	<i>IIIT Trichy</i>

- Co-editor of Aikyam, a bimonthly magazine of IIT Trichy that aims to promote the cultural diversity of India.
- Jointly led a team of 15 members to work towards collecting and reviewing contents received in various languages.

DeepLearning.AI

Spring 2020 –Spring 2021

Ambassador

Tiruchirappalli, TN

- Pie & AI Ambassador for DeepLearning.AI, representing the area of Tiruchirappalli, TN, India.
- Conducted several meetups to increase the awareness on AI in Tiruchirappalli, India