Bhavik Ardeshna

Kaggle: kaggle.com/bhavikardeshna Github: github.com/Bhavik-Ardeshna LinkedIn: linkedin.com/bhavik-ardeshna/

PUBLICATIONS

- GujaratiNLPSuite: novel resources for Gujarati Question Answering system: The first Gujarati benchmarking dataset for QA downstream task. Paper is under-process in Springer Journal for publication.
- Cascading Adaptors to Leverage English Data to Improve Performance of Question Answering for Low-Resource Languages: Paper was published at the International Conference of Natural Language Processing (ICON-2022) hosted by ACL Anthology. arxiv.org

Contributions

- Hugging Face: To investigate the effectiveness of multilingual pretrained transformer models in improving the performance of QA systems in a low-resource setup. I have fine-tuned the mBERT and XLM-R transformer models for seven different languages and published 13 models in HuggingFace. huggingface.com/
- Ivy The Unified Machine Learning Framework: Added generic input argument to functions of Ivy, Change the docstring of the function, Run all tests for the same of the nest function. #PR-2002

EXPERIENCE

Heliconia Solutions Remote

Software Associate Intern

Dec 2020 - April 2021

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- PDFConverter Tool: Developed the Rotate, Merge, Split, Convert Extension, and Crop Pdf functionality and deployed to the realtime AWS EC2 to the production. *Django*, *Flask*, *React.js*, *and EC2*
- CanvaQuote Designer: Creatively.io provides features to create their own canvas and with the help of its beautifully
 designed UI user can share to the world. Worked with Editor and APIs pipelining team. Reat.js, Nodejs, MongoDB,
 and Auth
- Python Automation Team: Developed the five uitlity automation task using python for various state-of-the-art of ML team.

Projects

- Visual QA MultiModular Architecture (Transformer, PyTorch, HuggingFace, Computer Vision, NLP): It emphasizes the featurization of image and question, feature fusion, and answer generation for the multimodal system for VisioLinguistic tasks, using different text and vision transformers to evaluate the efficacy of QA downstream task using a multimodular framework. github.com/visual-qa
- Question Answering for Low-Resource Languages (NLP, Language Modeling, Adapters, HuggingFace): We trained four variants of adapter combinations for *Hindi*, *Arabic*, *German*, *Spanish*, *English*, *Vietnamese*, *and Simplified Chinese languages*. We demonstrated that by using the transformer model with the multi-task adapters, the performance can be improved for the downstream task. *github.com/qa-low-resource*

SERVICE AND AWARDS

- Kaggle 3x-Expert: Dataset, Notebook, and Discussion
- Author at Becoming Human: Artificial Intelligence Magazine: featured on Google My neoteric article Basic intuition of Conversational Question Answering Systems (CQA) and Semantic Alignment of Linguistic and Visual Understanding using Multi-modal Transformer.
- Top-10% at American Express Default Prediction Hackathon: September, 2022
- Open-Source Contributer to various organizations: HuggingFace, AdapterHub, Mozilla

EDUCATION

Dharmsinh Desai University

Gujarat, India

Bachelor of Technology - Computer Science; GPA: 8.9

2019 - 2023

Courses: Natural Language Processing, Image Processing, Data Structures Algorithms, Database, Big-Data Analysis

SKILLS

• Technologies: Deep Learning, NLP, NLU, Image Processing, Database Management

• Languages: Python, C++, JavaScript, SQL, MongoDB, Bash

Frameworks: PyTorch, TensorFlow, JAX, Keras, Django/Flask, MERN
 Tools: HuggingFace, Docker, GIT, PostgreSQL, MySQL, SQLite
 Platforms: AWS, Linux, Windows, AWS, AdapterHub, Kaggle, Colab

• Soft Skills: Growth Mindset, Emotional Intelligence, Active Listening, Work Ethic

Volunteer Experience

Team Coordinator at Anurakti Foundation

Gujarat, India

We have a total of 8 camps in cities with 50+ volunteers are teaching 300+ students.

 $Oct\ 2019$ - Present

Core Team Lead Google Developers Clubs

Gujarat, India

Organized events, conducted workshops and delivered workshops reaching over 7000 developers. Sep 2020 - Present