

Tanaya Babtiwale

tanaya.babtiwale98@gmail.com | +91-9967575375

LinkedIn | Website | Google Scholar

EDUCATION

NMIMS University

Bachelor of Technology, Computer Engineering

Mumbai, India

August 2020

EXPERIENCE

Machine Learning Engineer

May 2021 – Present

Software Engineer - Machine Learning

November 2020 – May 2021

Haptik

Mumbai, India

- Conducted research on end-to-end dialogue policy, one-shot intent detection, inverse text normalization, customer satisfaction feedback analysis, and augmented data evaluation.
- Led production release for multilingual entity detection, external article ranking, and for above research projects.
- Received Award of Excellence for integrating information extractor with the product in a company-wide hackathon.

Research Intern

May 2020 – August 2020

IBM Research Labs - AI

Bangalore, India

- Studied the use of domain-agnostic meaning representations to conduct semantic reasoning over natural language queries to interpret implicit intent, built corresponding framework, and presented the work at COLING 2020.
- Recognized as the winner for an intern-wide competition *Science Slam* for presenting my affiliated research.

Summer Intern - AI

May 2019– July 2019

Mahindra and Mahindra

Mumbai, India

- Deployed a system to extract, information from unstructured business cards to be used as an internal tool.
- Collaborated with teams to introduce *Mood-o-meter*: an AI-powered chatbot to gauge employee sentiments.

Intern - Natural Language Processing

May 2018– July 2018

Episodic Labs

Ahmedabad, India

- Introduced generation of humanized game commentary from real-time cricket match statistics using LSTM.

RESEARCH PROJECTS

Bringing Advances of NLP to Marathi | *Undergraduate Thesis*

NMIMS University

- Devised mBERT-inspired neural architecture with custom tokenizer and built a training corpus for Sentiment Analysis, NER, and News Headline Classification tasks for the Marathi language.
- Deployed an android application to demonstrate aforementioned tasks with in-built OCR for the Devanagari script.

Chatbot for Suicide Prevention | *Coursework - Object Oriented Software Engineering*

NMIMS University

- Conceptualized a chatbot aimed at human-like conversations (patent pending) and systematized a prototype trained on relevant conversations from Reddit using Rasa.

Miscellaneous Projects

- Emotion Detection from Facial Features
- Capsule Networks for Scene Understanding
- PyTorch Scholarship Challenge by Facebook
- Eyelog - Scene recognition for the visually impaired
(2nd place: University-wide App Development competition)

PUBLICATIONS

Sen, J., **Babtiwale, T.**, Saxena, K., Butala, Y., Bhatia, S., & Sankaranarayanan, K. (2020, December). *Schema Aware Semantic Reasoning for Interpreting Natural Language Queries in Enterprise Settings*. In Proceedings of the 28th International Conference on Computational Linguistics (pp. 1334-1345).

Arya, S., & **Babtiwale, T.** (2019, September). *Capsule Networks for Semantic Segmentation*. In 2019 5th International Conference On Computing, Communication, Control And Automation (ICCUBEA) (pp. 1-6). IEEE.

Gupta, A., **Babtiwale, T.**, Jain, C. & Modi, K. *HDIAL: Dataset for granular benchmarking of dialogue system on recurring linguistic phenomena*. (under review at NAACL'22)

INVITED TALKS & PRESENTATIONS

Data that puts the Chatbot in a Pickle, WomenTech Global Conference 2022, June 2022

Industry-Ready with Computer Science, Industry Lecture Series, NMIMS University, February 2022

NLP in the Real World, Webinar, Mantissa Data Science, August 2021

A Git How-To Guide, Seminar, Data Science in Healthcare certification course, Bombay College of Pharmacy, June 2021

Schema Aware Semantic Reasoning for Interpreting Natural Language Queries in Enterprise Settings., Poster presentation, 28th International Conference on Computational Linguistics, December 2020

CERTIFICATIONS

Certificate in Phonetics and Phonology University of Mumbai

AI: Search Techniques for Problem Solving (*First Class*) NPTEL, Indian Institute of Technology- Madras

Academic Alliance, Cloud Infrastructure and Services v2 - Cloud Certification Dell EMC

Lean Six Sigma - Green Belt KPMG

SKILLS

Research Domains: Natural Language Understanding · Machine Learning · Deep Learning · Linguistics

NLP Sub-domains: Dialogue Systems · Question Answering · Entity Extraction · Semantic Web

Spoken Languages: English · Marathi · German · Hindi · Gujarati

Programming Languages: Python · Java · C/C++ · Javascript · Web Ontology Language

Tools & Frameworks: PyTorch · Tensorflow · Keras · Django · Docker · Git · Huggingface · RDF · XML

Databases: SQL · MongoDB · NoSQL · PostgreSQL