



Debaghya Datta

M.Tech: Computer Science & Engineering

Indian Institute of Technology, Bhilai

debaghyad@iitbhillai.ac.in

deb-iitbh

codechef

deba-iitbh

devildev.me

Examination	University	Institute	Year	CPI/%
Post Graduation	IIT Bhilai	IIT Bhilai	2022-24	9.75
Graduation	KIIT	KIIT	2017-21	9.22
Senior School	HSC	Aditya Academy	2017	85.00
Secondary School	SSC	Aditya Academy	2015	9.40

M.TECH THESIS

Named Entity Disambiguation in Medical Conversational Question-Answering

(Guide: Dr.Soumajit Pramanik)

(Dec'22-Present)

Current work:

- Trained different Transformers(BERT,GPT2,T5) model to detect different entities in the conversational context.
- Integrated a Medical Knowledge graph to extend the capabilities of the Transformers.

Future work:

- Integrate common sense Knowledge graph to better understand the colloquial language.

PROJECTS

College Queries Chatbot

under Dr. Soumajit Pramanik

(Oct'22-Nov'22)

- Corpus - Based on IIT Bhilai website
- QA dataset - We have created a custom dataset which includes the FAQ of IIT Bhilai
- Baseline - Word vectors (Word2Vec, FastText)
- BERT model - Using custom dataset, fine-tuned the BERT model on MLM task.

Named Entity Classifier using Word Embeddings

(Sep'22-Oct'22)

- Created embeddings based on Skip-gram, CBOW, GloVe using latest Wiki dump
- Evaluated the embeddings using spearman correlation
- Embeddings are used to build a NER classifier to achieve 80% on test-set

Partial Payment Amount Predictor for Invoices

(Apr'20-June'20)

- Predict the first partial payment
- Testing different models like
 - * Polynomial Regression
 - * Decision Tree
 - * Support Vector Regression(SVR)
 - * XGBoost

TECHNICAL SKILLS

- Programming & Scripting Languages:** C, C++, Java, Bash & Posix, Python, HTML, CSS
- Tools & Libraries:** Git, Linux, MySQL, LaTeX, Pytorch, Sklearn, Huggingface, Matplotlib, Seaborn
- CS Fundamentals:** Data Structure & Algorithms, Operating Systems, DBMS, Compiler Design

WORK EXPERIENCE & INTERSHIPS

Systems Engineer | TCS

(May'20-July'21)

- Functional Testing of E2E Features
- Automated manual test scenerios
- Identified quality issues and created test-reports

Tech Intern | HighRadius

(Apr'20-June'20)

- Completed a full stack software project
- One of the top performers in the Internship

POR & EXTRA-CURRICULARS

- Teaching Assistant for the course, CS100 : Software Tools and Technologies
- Teaching Assistant for the course, DS210 : Data Analysis and Visualization
- Teaching Assistant for the course, IC100 : Introduction to C Programming

(Mar'23-Present)

(Jan'23-Mar'23)

(Sep'22-Feb'23)

ACHIEVEMENTS

- Participated in Inter-IIT 2022(NLP Track). Our team ranked 13th out of 23 IITs.
- AIR 1683,GATE 2021