Nalin **Kumar**

First Year MS | Aspiring NLP Researcher

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♥ Prague, Czech Republic

☑ Personal Webpage



EDUCATION

2021 - 2023 Charles University

Prague, Czech Republic

Master's in Computer Science - Language Technologies and Computational Linguistics

2016 - 2021

National Institute of Science Education and Research

Bhubaneswar, India

Integrated MSc (7.41/10)

Thesis Advisor: Dr. Subhankar Mishra Major | Mathematics | Minor | Computer Science

SKILLS

Programming Languages Python | R | HTML | LETEX

Tools and Softwares MATLAB | Mathematica | MS Visual Studio Code | Streamlit | RStudio

Tensorflow | PyTorch | Numpy | Scikit-learn | Pandas | OpenCV | SpaCy | NLTK **APIs & Libraries**

Machine Learning Machine Learning Algorithms | Deep Learning | NLP (Word Embeddings, Sentiment Classifica-

tion, NMT, NLU, Dialogue Systems) | Computer Vision (Object Classification, Object Detection

& Recognition)

Statistics Hypothesis Testing | Parametric Inference | Bayesian Inference



SCHOLARSHIPS

Computational Linguistics Scholarship (CLS 2021) CUNI, Czech Republic 2021-23

INSPIRE Scholarship DST, India 2016-21

Publication(s)

QUARC: Quaternion Multi-Modal Fusion Architecture For Hate Speech Classification [Link] 2021

Deepak Kumar*, Nalin Kumar*, Subhankar Mishra

2021 IEEE International Conference on Big Data and Smart Computing (BigComp)

*equal contribution

2021 NLP@NISER: Classification of COVID19 tweets containing symptoms [Link]

Deepak Kumar*, Nalin Kumar*, Subhankar Mishra

Accepted as a shared task system description at 6^{th} SMM4H, NAACL 2021

*equal contribution



WORK & EXPERIENCE

Odd Sem 2021 Semester Project | NISER

Bhubaneswar, India

Semester Project under Dr. Subhankar Mishra in Neural Machine Translation (NMT).

> Studied current works and worked on many-to-one NMT systems for low-resourced languages.

Even Sem 2020

Semester Project | NISER

Semester Project under Dr. Subhankar Mishra in Neural Machine Translation (NMT) for low-resource languages.

> Worked on applicability of bilingual dictionary in NMT in extremely low-resource setting.

Odd Sem 2020

Semester Project | NISER

Bhubaneswar, India

Semester Project under Dr. Subhankar Mishra in Neural Machine Translation (NMT).

> NMT of Atharvaveda (one of the Vedic scriptures of Hinduism).

Oct 2020

Data Science Intern | TATA STEEL

India

Aug 2020 Worked under Mr. Sanjoy Biswas, Head of Advanced Analytics, Kalinganagar and Mr. Saibal Nandi, Head Analytics Marketing and Sales.

- > Worked on detection and counting of steel reinforcement bars using deep learning.
- > Worked on Dealer names matching (Entity Matching) using Machine Learning.
- > Worked on Document Verification for FAMD Exports, TATA Steels, using text analytics and its UI development (using Streamlit) which is further deployed on GCP so that the app is accessible to the users remotely in COVID times. The project is identified under Shikhar Initiative and is estimated to save approx. INR 1 Cr.

Even Sem 2020

Semester Project | NISER

Bhubaneswar, India

Semester Project under Dr. Subhankar Mishra in Computer vision.

- > Emotion detection of Tom & Jerry.
- > COVID-19 Face-mask Detection.
- > Worked on survey paper in existing face detection algorithms.

Dec 2020

Winter Research Intern | JNU

New Delhi, India

2 weeks winter internship under Dr. Narinder Singh Sahni on Gaussian process.

Odd Sem 2019

Semester Project | NISER

Bhubaneswar, India

Semester Project under Dr. Subhankar Mishra on Deep Learning.

- > Worked on the paper on novel architecture QUARC, Quaternion multi-modal fusion for hate speech classification.
- > IMDB Movie review classification using Deep Learning.
- > Digit Recognition using Deep Learning.

May 2019

Summer Research Intern JNU

New Delhi, India

Jul 2019 Summer research internship under Dr. Narinder Singh Sahni on Regression Analysis.

- > Parametric Regression models
 - > Explored different simpler linear and non-linear parametric models arising from the five-point non-linear model used by the vendors to fit the concentration-absorbance curve of HbA1c(used in measurement of average sugar levels over a period of 3 months).

Jun 2018

Summer Research Intern | IIT HYDERABAD

India

Summer internship under Dr. Narasimha on Introduction to Cryptography.

Jul 2017 May 2017

Summer Research Intern | Harish Chandra Research Institute (HRI)

Allahabad, India

Summer internship under Prof. Kalyan Chakraborty on Group Theory.

■ Workshops & Programmes

2020 | SciPy India 2020 | RЕМОТЕ

Bhubaneswar, India

Conducted a 2 hour workshop with one of my batch-mates Deepak Kumar on "Object counting in an image via Object Detection and Marking"