

Uma Sushmitha Gunturi

+91-7382010309 | ug6337@bennett.edu.in | linkedin.com/in/umagunturi/ | github.com/UmaGunturi

EDUCATION

Bennett University

Bachelor of Technology in Computer Science, 8.99 CGPA

Greater Noida, India

Aug. 2017 – May 2021

Sri Chaitanya Vidya Niketan

Intermediate, 97%

Vishakapatnam, India

Aug. 2015 – May 2017

EXPERIENCE

Research Intern

Apr. 2020 – Present

MIDAS LAB - Indraprastha Institute of Information Technology (IIIT)

Delhi, India

- Worked under the supervision of Dr. Debanjan Mahata and Prof. Rajiv Ratn Shah on building a Hindi-English Code-Mixed conversations corpus and processed this data for linguistic analysis as well as computational modelling.
- The above analyses can be used for developing dialog systems in multilingual regions.
- Also worked on building a social role model framework for users facing mental health issues due to COVID-19 pandemic using unsupervised machine learning models.
- This framework is used for facilitating community level participation and improving user engagements by recommending specific functional roles.

Summer Intern

May 2020 – July 2020

UST Software India Private Limited

Delhi, India

- Developed a machine learning tool that utilizes LDA to model topics amongst queried tweets, and performs sentiment analysis on the tweets.

Research Intern

May 2019 – Aug. 2019

Georgia Institute of Technology

Atlanta, GA

- Worked under the supervision of Prof. Devi Parikh at Visual Intelligence Laboratory in the area of Visual Question Answering.
- Implemented the research paper *Analyzing the behavior of Visual Question Answering Models* on the current state of the art model 'Pythia' to analyze various biases the older models suffer from.

Visiting Research Scholar

June 2018 – July 2018

Georgia Institute of Technology

Atlanta, GA

- Worked under Prof. Xu Chu as a part of an observational program in the field of Machine Learning Interpretability and built an ML tool to understand decisions made by various black box models.
- This tool can be used to assist users in explaining and analysing various machine learning models

PUBLICATIONS

- Modeling Social Roles in Online COVID-19 Communities | *ICWSM 2021 (The International AAAI Conference on Web and Social Media)* (Manuscript under review)
- GupShup: An Annotated Corpus for Abstractive Summarization of Code-Switched Conversations | *(NAACL-HLT 2021 (North American Chapter of the Association for Computational Linguistics))* (Manuscript under review)

PROJECTS

Detection of Propaganda Techniques in News Articles | *Python, TensorFlow*

- Worked under the supervision of Dr. Vipul Mishra on developing a concrete proposal that can accurately classify articles that are Propagandistic or not using transformer-based RoBERTa model.
- Experimented with SemEval 2020 news articles corpus and achieved an F1 score of 0.75 which exceeded baseline works on the dataset.

Mind Space | *Java, Android, Firebase*

- Developed an Android App for improving mental health and well being using Firebase.

- This App is a simple personal guide to mental health with features that helps provide necessary information about MH disorders and personal assistance from an expert psychiatrist.

Image Classifier using Data Augmentation | *Python, OpenCV*

- Created a customized object detection model for visually impaired persons which is light weighted with the help of CNNs.
- Used data augmentation to generate a large number of synthetic images from a single image.

Monitoring Elderly Living Alone | *Python, OpenCv, TensorFlow*

- Worked under Prof K.K.Biswas in developing a fall detection system for remotely determining the functional health status of an elderly person using Background Subtraction and Time Frame analysis.
- The system could passively observe interactions between elderly people and their living environment over a long time.

TECHNICAL SKILLS

Technical Languages: Java, Python, C/C++, SQL, HTML/CSS, MIPS

Developer Tools: Git, Google Cloud Platform, VS Code, Eclipse, Android Studio, Flask, FireBase

Libraries: pandas, NumPy, Matplotlib, OpenCV, Tensorflow, Spacy, TextBlob, NLTK

Non-Technical Languages: English, Hindi, German, Telugu

VOLUNTEERING

Fundraising Intern

Apr. 2020 – June 2020

CRY - Child Rights and You

India

- Organized a volunteer centric COVID-19 response related E-Camp called Summer Together to engage children during lockdown and also help raise funds for the cause.
- The work consisted of planning the event, on- boarding session experts, publicising the event for sign ups and overseeing the progress of the camp.

Core Team Member - IEEE Student Chapter

Dec. 2018 – Nov. 2019

Bennett University

Greater Noida, India

- Responsible for managing projects, conducting technical workshops and introductory events for the freshman at university.

ACHIEVEMENTS

- Received Academic Excellence Scholarship for every year of my undergraduate study
- Secured admission in the *Stanford University Summer Session 2020*
- Secured 15th position in the *IMMO(International Master Mathematics Olympiad IQ Zone)(2006-2007)*
- Among Top 10% in my institution at the 42nd National Mathematics talent competitions 2010 conducted by *The Association of Mathematics Teachers of India (AMTI)*

CERTIFICATES

- **Babson College:** 2019 Babson Collaborative Student Challenge Participant
- **deeplearning.ai:** Neural Networks and Deep Learning
- **deeplearning.ai:** Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization
- **deeplearning.ai:** Structuring Machine Learning Projects
- **deeplearning.ai:** Convolutional Neural Networks
- **Coursera:** Architecting with Google Compute Engine Specialization
- **Coursera:** Sequence Models for Time Series and Natural Language Processing

ORGANIZATIONS

Rewriting The Code

May 2020 – Present

Member

Google's Women Techmakers

May 2020 – Present

Member

IEEE Computer Society

Nov. 2018 – Present

Member