

Arijit Ghosh Chowdhury

LinkedIn— Github— Google Scholar

Email : arijit10@gmail.com

Mobile : +91-9711060347

EDUCATION

- **Manipal Academy of Higher Education** Manipal, Karnataka
B.Tech in Computer Science and Communication; GPA: 7.74/10 July 2016 - June 2020
 - Worked on determining early onset of sepsis in patients admitted in the ICU, using Deep learning.
 - As a founding member of the **Data Science Club**, provided a platform for students to collaborate and explore new technologies in Machine Learning.

PUBLICATIONS

- **Arijit Ghosh Chowdhury*** , Ramit Sawhney* , Rajiv Ratn Shah, Debanjan Mahata **#YouToo? Detection of Personal Recollections of Sexual Harassment On Social Media** Association of Computational Linguistics **ACL 2019**
- **Arijit Ghosh Chowdhury*** , Aniket Didolkar* , Ramit Sawhney , Rajiv Ratn Shah **Beyond Hostile Linguistic Cues: The Gravity of Online Milieu for Hate Speech Detection in Arabic.** ACM Hypertext and Social Media **ACM-HT 2019**
- **Arijit Ghosh Chowdhury*** , Ramit Sawhney* , Puneet Mathur, Rajiv Ratn Shah, Debanjan Mahata **Speak Up, Fight Back! Detection of Social Media Disclosures of Sexual Harassment** North American Association of Computational Linguistics - Student Research Workshop **NAACL-SRW 2019**
- **Arijit Ghosh Chowdhury*** , Aniket Didolkar* , Ramit Sawhney , Rajiv Ratn Shah **ARHNet- Leveraging Community Interaction** Association of Computational Linguistics - Student Research Workshop **ACL-SRW 2019**

EXPERIENCE

- **Optum, United Health Group** Bengaluru
Data Scientist - Intern January 2020 - Present
 - Built a question answer scoring system, and a novel feature importance algorithm to score Request For Proposals issued by the US Government
 - Created a query resolution system that learns user behaviour and assists UHC operators to reduce average handling time by 38 seconds, effectively saving 72000\$.
 - Built a disease prediction system, along with a synthetic data generation algorithm, that can predict occurrences of disease based on visit history.
 - Created a One-Function-Classification Library that lowers the effort and time needed to train Transformer based NLP models.
 - Undertook multiple learning sessions for Deep Learning in NLP as part of an upskilling drive.
- **IIIT Delhi** Delhi
NLP Research Associate - Intern November 2018 - Present
 - Part of the **Multimodal Digital Media Analysis Lab** under Dr Rajiv Ratn Shah, working on Social Media and NLP.
 - Created a public dataset and modelled it using a Medium-Specific Language Model to classify tweets as either a *recollection* of sexual harassment, or a *discussion* on the #MeToo movement. Presented my work as a long paper at **ACL 2019**
 - Augmented text classification models for Hate Speech Detection by adding Graph Embeddings to model community interaction and add an extra signal for prediction of hateful content within Arabic Tweets. Presented our work at **ACM Hypertext 2019** and **ACL-SRW 2019** .
- **RentSher** Bengaluru
Machine Learning Engineer - Intern May 2019- July 2018
 - Built the module for items frequently bought together from scratch.
 - Implemented a digital KYC system to automatically flag users based on documents they have uploaded.
 - Implemented a proof of concept for intelligent delivery services across Dubai warehouses.
- **Project MANAS** Manipal
Senior AI Developer Jan 2017 - Feb 2018
 - Project Manas is Manipal University's Undergraduate AI Research Team. Currently participating in the 1 Million dollar 'Mahindra Spark the Rise – **Driverless Car Challenge**'
 - Successfully achieved Level 2 autonomy on a Mahindra E20.
 - Wrote the algorithm to localize and classify Traffic Signs and Signals with an 85% accuracy.

REMOTE COLLABORATION

- **Bloomberg** New York
Research Collaboration
 - Research Paper accepted to **ACL 2019** as a long paper to the main track.
- **National University of Singapore** Singapore
Research Collaboration
 - Currently working on a research paper on text style transfer with Dr Kokil Jaidka, in collaboration with Midas-IIITD and **Adobe Research**.

PROJECTS

- **Self Driving Car - Project MANAS** Successfully achieved Level 2 autonomy on a Mahindra E2O. Wrote the algorithm to localize and classify Traffic Signs and Signals.
- **sleep.AI -Microsoft Code.Fun.Do** sleep.AI is a music engine that produces soothing AI generated music. Built using a combination of multiple recurrent neural networks.
- **Synapse - Java Neural Network** Built an interactive tool for tuning hyperparameters of a neural network. Neural Network built on Java from scratch.
- **Topic-Modeling of YouTube Interviews** Built a speech-to-text module to generate transcripts from YouTube interviews. Segregated interviews into topics using lda2vec.
- **Numpy-CNN** A Convolutional Neural Network written in pure numpy without any deep learning framework or library
- **Blood Pressure Prediction** Long term Blood Pressure Prediction using LSTM Recurrent Neural Networks for a time series data.
- **Extractive Text Summarization** Unsupervised clustering of text within a document using Skip-Thought vectors to generate a representative sentence from a cluster of similar sentences

ACCOMPLISHMENTS

- Selected as one of the **top 100 researchers** in Computer Science to attend the Heidelberg Laureate Forum.
- Awarded the ACM SIGWEB SIGSTAP **Travel Grant** to present my paper at ACM Hypertext 2019 at Germany.
- Selected for the **Harvard US India Initiative** for Young Leaders across India
- Top 13 out of 257 participating teams for the **Mahindra Rise Driverless Car Challenge**

VOLUNTEER EXPERIENCE

- **Teach Code for Good** - Teaching Python and HTML to children in nearby schools, who don't have access to computers or computer science faculty inside their schools.
- **Association of Computational Linguistics** - Reviewer for the ACL Student Research Workshop 2020
- **IEEE BigMM** Program Chair for the MultiModal AI for Social Good Workshop