Kartik

✉ kartik@ucsc.edu   🎓 gscholar   kartikaggarwal.me

Education

UC Santa Cruz   **Sep. 2021 – Aug. 2022**
Masters in Natural Language Processing — GPA: 4.0 (A+)   *Santa Clara*

NSIT, University of Delhi   **Aug. 2016 – June. 2020**
Bachelors in Automation Engineering — GPA: 8.17   *New Delhi*

Coursework

- ML for NLP
- Intro to NLP
- Linguistics
- Data Collection
- Advanced Calculus
- Artificial Intelligence
- Probability
- Statistics

Publications

- HS Dutta*****, **Kartik Aggarwal***, Tanmoy Chakraborty. *DECIFE: Detecting Collusive Users Involved in Blackmarket Following Services on Twitter.* **13th ACM Conference on Hypertext and Social Media, 2021** [pdf] [code]

- G.S. Walia, **Kartik Aggarwal**, K. Singh, K. Singh. *Design & Analysis of Adaptive Graph based Cancelable Multi Biometrics Approach.* **IEEE Transactions on Dependable and Secure Computing, 2020** *(IF:7.2)* [pdf]

- **Kartik Aggarwal**, Anubhav Sadana. *NSIT@NLP4IF-2019: Propaganda Detection from News Articles using Transfer Learning.* **NLP for Internet Freedom, EMNLP-IJCNLP 2019, Hong-Kong** [pdf] [code]

- S. Anand, D. Mahata, **Kartik Aggarwal**,..,Rajiv Ratn Shah, K. Uppal. *MIDAS at SemEval-2019 Task 9: Suggestion Mining from Online Reviews using ULMFit.* **SemEval 2019, NAACL, Minnesota, USA** [pdf] [code]

Research Experience

Sharechat   **Nov 2020 – June 2021**
Data Science Intern, *Advisor: Vikram Gupta, Dr.Shad Akhtar*   *Bengaluru, India*

- **Holistic Video Understanding:** Genre identification and Emotion recognition in short videos (reels). Language, Acoustic and Visual features were used to understand the cross-modal interactions for multimodal video classification.
- **Status-Response Ranking:** Collected large Open-domain Hindi status-comments data from social-media (sharechat+twitter). Built a context based response ranker to retrieve comments given a post.

LCS2, IIIT Delhi   **May 2020 – June 2021**
Research Assistant, *Advisor: Dr.Shad Akhtar, Dr.Anoop Kunchukuttan, Dr.Tanmoy Chakraborty*   *Delhi, India*

- **Code-Mix translation:** Proposed a Multilingual Neural Machine Translation system for Code-Mixed Indian languages. Built the first large-scale Hinglish-English Parallel Dataset synthetically.
- Published work on **Collusive User Detection** on Twitter using Graph Transformer Networks.

SAG Lab, DRDO   **Aug 2018 – May 2019**
Research Intern, *Advisor: Dr.G.S. Walia*   *Delhi, India*

- Published work on a novel multimodal iris recognition system using CNNs & Graph-Fusion approach.
- Security and privacy analysis performed against various adversary attacks.

Technical Skills

Proficient: Python, C++, PyTorch, Numpy, Pandas, SQL   **Familiar**: HTML/CSS, JavaScript, Fastai, Keras, Django

Leadership / Extracurricular

- Team Rank-10, Shared Task-9: Suggestion Mining from Online Reviews, SemEval, 2019
- *Attended*: Athens NLP Summer School, NCSR Demokritos, Greece, 2019 (Acceptance Rate: 18%)
- *Attended*: CVIT Machine Learning Summer School, IIIT Hyderabad, 2019 (Acceptance Rate: 28.5%)
- *AI Instructor, CampK12*: Taught foundations of machine learning and computer vision to 50+ high school students.
- *Ambassador, Nuture.ai*: Organized free ML (fast.ai) study groups every week targeted for people at all skill levels.
- *Technical Head, Entrepreneurship Cell NSIT*: Planned all technical interfaces for ECell-NSIT; Managed a team of 15+ students; Ideated annual technical events for E-Summit, NSIT.
- Student Travel Grant, E-Summit, IIT Bombay, 2018