

PRABHAT AGARWAL

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EDUCATION

Stanford University

MS in Computer Science

2019-Expected June 2021 — Stanford, CA

Relevant Courses: Artificial Intelligence, Machine Learning with Graphs

IIT Kharagpur

B. Tech (Hons.) in Computer Science & Engineering

2013-2017 — Kharagpur, WB, India

Cum. GPA: 9.93 / 10.0

Relevant Courses: Machine Learning, Information Retrieval, Social Computing

Speech & Natural Language Processing, Deep Learning, Operating Systems, Parallel & Distributed Algorithms

TECHNICAL STRENGTHS

Computer Languages

Java, C/C++, Python, Javascript, Bash

Frameworks

scikit-learn, Tensorflow, nltk, opencv, PyTorch

Others

gdb, Git, asio, Network and Systems programming

PUBLICATIONS

- [1] P. Agarwal, A. Sharma, J. Grover, M. Sikka, K. Rudra, and M. Choudhury. I may talk in english but gaali toh hindi mein hi denge: A study of english-hindi code-switching and swearing pattern on social networks. In *2017 9th International Conference on Communication Systems and Networks (COMSNETS)*, pages 554–557. IEEE, 2017. <https://doi.org/10.1109/COMSNETS.2017.7945452>.

EXPERIENCE

Goldman Sachs

Analyst, SecDb Architecture

Jun 2017 - Aug 2019

Bengaluru, India

- Led a team of 4 to develop a system to provide a central service for real-time queries on firm's primary trade and risk data, with horizontal scalability, high availability and multi-region deployment.
- Enhanced transaction/write controls and conflict meta-data generation in firm's proprietary trade database (in-memory object database developed in C++).

KEY PROJECTS

FactRanker: Automatic Ranking of check-worthy claims

B.Tech Thesis, Dr. Pawan Goyal (IIT Kharagpur)

Jul 2016 - Apr 2017

- Curated a dataset of political debates from the 2016 US Presidential election campaign annotated using all major fact-checking media outlets.
- Designed a system FactRanker to rank claims by their check-worthiness using the score of an SVM classifier trained on text (e.g. POS tags, sentiment, word dependencies) and contextual features (e.g. topic, sentence homogeneity).
- Improved the then state-of-the-art (ClaimBuster) in ranking check-worthy claims by 21.7% in NDCG@100.

Stance Classification of News Articles

B.Tech Thesis, Dr. Pawan Goyal (IIT Kharagpur)

Jan-May 2017

- Designed a classifier using bidirectional conditional encoding with word-by-word attention (in Tensorflow) to classify if an article agrees, disagrees or is neutral to a given statement or headline.
- Achieved an accuracy of 74.52%, an improvement of 10.1% over the baseline model using text features.

Code-switching and swearing behaviour on social media

Dr. Monojit Choudhury (Microsoft Research, India)

Jul 2015 - Jan 2016

- Developed a rule-based classifier (with 72% precision) to detect swears in Romanized Hindi and English tweets using phonetic edit distance (for Romanized Hindi) to account for large spelling variations due to transliteration.
- Studied correlation of topic, gender, and language preferences while swearing.

AWARDS AND ACHIEVEMENTS

Bigyan Sinha Memorial Endowment Prize, 2017: Second best student in order of merit in the B.Tech (Hons.) class of 2017
Institute Silver Medal, 2017: Best student in order of merit in the B.Tech (Hons.) in Computer Science and Engineering class of 2017

Sachinandan Basak Memorial Endowment Prize, 2015: Best National Social Service (a program aimed at developing rural areas near institutes) student volunteer among about 400 students