EDUCATION

Indian Institute of Technology, Guwahati, India

Bachelor of Technology in Computer Science and Engineering.

CGPA: 9.42/10. Consistently in Top 3 out of 88 students in last 3 semesters (Overall Rank:6th)

EXPERIENCE

Microsoft India(R&D) Pvt. Ltd.Senior Data and Applied Scientist (L-63) (July'17 - Present)Microsoft AdvertisingSummer Intern (May'16 - July'16)

CLOVER: Close Variant Generation using RL [Paper]

- A novel approach for generating rewrites using a generative model and controlling the drift using reinforcement learning by enforcing human judgements via an evaluation model.
- $\cdot\,$ Shipped improvements in multiple multilingual markets with 2% revenue gain and 14% defect reduction

Project Membrane [Lead]

- · Developing SOTA for incorporating filtration during graph search for embeddings.
- \cdot Aimed to improve recall by 40% over current system without latency increase.

Dense Retrieval and Post Filtration [Lead]

- \cdot Shipped various multilingual Siamese architectures like TwinBERT, cost-sensitive models across more than 30 markets with absolute revenue impact being more than 4%
- \cdot Deployed post filtration logic to nearly 30 markets with cut in cost to serve as high as 35%

Initiatives for team

- $\cdot\,$ I lead an educative tech talk series aimed to improve documentation, systems and tools understanding across team with defined OKRs
- · Part of D&I initiative to ensure smooth onboarding of new talent via mentorship program

PUBLICATIONS

- · AK Mohankumar, **N.Begwani**, A.Singh *Diversity driven Query Rewriting in Search Advertising*. In Proceedings of KDD 2021, ADS Track [Paper]
- **N.Begwani**, S.Harsola, R.Agrawal, *Learning From Weights: A Cost-Sensitive Approach For Ad Retrieval.* In Proceedings of CODS COMAD 2020 [Paper]

ACHIEVEMENTS

- · Masters offer from Carnegie Mellon University Pittsburgh in Computational Data Science 2019
- $\cdot\,$ Microsoft Bing Ads FY2018 Q4 Award for Excellence in Innovation (2018)
- Two time winning team at Microsoft code.fun.do (Campus Edition) (2014 & 2016) and amongst Top 10 teams in National Final, 2017
- · Attended Winter School at Gifu University, Japan [Only 7 students from IITG] (2015)

· IIT - Joint Entrance Examination - Among Top 0.07% students (AIR 1087) (2013)

RELEVANT COURSE WORK

Information Retrieval	Intelligent Systems(NLP)	Linear Algebra	Optimization
Probability and Random Processes	Operating Systems	Computer Vision	Databases
Pattern Recognition [*]	Algorithmic Game Theory	Deep Learning [*]	Compilers

*Voluntary Additional Courses

TECHNICAL SKILLS

Languages	Python, $C/C++$, $C#$
Packages/Libraries	Tensorflow, Keras, pyTorch, NumPy, scikit-learn, NLTK, pandas, IATEX
Miscellaneous	SQL, Visual Studio, Git, Django

2013 - 2017