

Akshit Sinha

<https://viciousaegis.github.io/> @ akshit.sinha@students.iiit.ac.in github.com/viciousaegis [Google Scholar](#)

Education

Present | **International Institute of Information Technology, Hyderabad** | **Hyderabad, India**
July 2021 | B.Tech (Hons) in Computer Science and Engineering | CGPA: 8.55/10

Experience

Aug 2024 | **Adobe Research** | **Bangalore, India**
May 2024 | *Research Intern*
Worked on benchmarking large language models on a new iterative and contextual document updation task.

Aug 2024 | **Google DeepMind (formerly Google Research) | InfoNets** | **Remote**
Jan 2024 | *Student Research Collaborator*
Introduced a new benchmark to evaluate controversy detection models mimicking the real-world data distribution.

Present | **Precog Research Group** [[🌐](#)] | **Hyderabad, India**
May 2023 | *Undergraduate Researcher | Advisor: Prof. Ponnurangam Kumaraguru*
Working on ideas in explainability, robustness and trustworthiness of neural networks, specializing in graph representation learning.

Oct 2022 | **AnkiDroid** [[🌐](#)] | **Remote**
May 2022 | *Google Summer of Code 2022*
Worked with AnkiDroid team on the Card Browser, made UI/UX improvements to the design, and ported features from the Anki Desktop app to AnkiDroid.

Publications

[* = Equal Contribution]

- [2] **Sanity Checks for Evaluating Graph Unlearning** [PDF]
Varshita Kolipaka*, [Akshit Sinha*](#), Debangana Mishra, Sumit Kumar, Arvindh Arun, Shashwat Goel and Ponnurangam Kumaraguru
3rd Conference on Lifelong Learning Agents Workshop Track (CoLLAS) [CoLLAS-W '24]
- [1] **Higher Order Structures for Graph Explanations** [PDF]
[Akshit Sinha*](#), Sreeram Vennam*, Charu Sharma and Ponnurangam Kumaraguru
Arxiv Preprint
- [S.1] **A shot of Cognac to forget bad memories: Corrective Unlearning in GNNs**
Varshita Kolipaka*, [Akshit Sinha*](#), Debangana Mishra, Sumit Kumar, Arvindh Arun, Shashwat Goel and Ponnurangam Kumaraguru
[In Submission]

Select Projects

Community Detection and Influencer Identification in Indian Social Networks | **May'23 - Apr'24**
Advisor: Prof. Ponnurangam Kumaraguru | In Collaboration with DRDO [[🌐](#)]

- > Created an end to end system to identify online communities in social media, focusing on the Indian subcontinent.
- > The system included (i) collection of data from various social networks, followed by preprocessing and cleaning of data, (ii) applying state-of-the-art algorithms to perform various analyses based on location, political preferences, common interests, etc, and (iii) combining and packaging both steps into a deliverable sweb application with a unifying dashboard.

Movie Genre Prediction with Language Models

Aug'23 - Dec'23

[CS7.403] *Statistical Methods in AI* | [Source Code](#) [🔗]

- > Used various classical ML models as well as language models to predict the genre of movies from their plots on the publicly available IMDB movies dataset.
- > We beat the scores reported in the original [report](#) for this task, and implemented complex architectures such as an LSTM, GRU and Transformers.

VASH

Aug'22 - Dec'22

[CS3.301] *Operating Systems and Networks* | [Source Code](#) [🔗]

- > The Vicious Aegis Shell is a shell coded in C emulating the BASH shell. Includes features like piping, redirection, background processes, and more.

Teaching and Leadership Roles

[CS2.201] Computer Systems Organisation *Teaching Assistant*

Jan'24-May'24

- > Introductory course on low level computer architecture.
- > Responsibilities included curating assignments, conducting weekly tutorials, and grading quizzes and assignment submissions.

[CS4.301] Data and Applications *Teaching Assistant*

Aug'23-Dec'23

- > Introductory course on data modelling and data systems.
- > Responsibilities included curating assignments, conducting weekly tutorials, and grading quizzes and assignment submissions.

Open Source Developers' Group (OSDG), IIIT Hyderabad *Club Coordinator*

Mar'23 - Feb'24

- > Conducted an intra-college beginner hackathon with over 150 participants from year 1 and year 2.
- > Conducted various events related to open source software, Linux systems, Google Summer of Code, and a weekly event "Open Source Saturdays".

Honours and Awards

Dean's List Fall'22 Awarded to top academic performers in an academic year.

JEE Mains, 2021 Achieved All India Rank < 1000 with a percentile of 99.94.

Academic Service

Organising Volunteer ACM CompEd'23 [🔗]