Effective Technical Communication and Navigation Research







Why?

Professional Networking

Emails - LinkedIn DMs - Slack DMs - WhatsApp reach outs

- Reach out to Professor's for research positions
- Reach out to Industry professional's for collaboration opportunities
- Apply for Internships/ Jobs
- Reach out for advice/ mentorship

Lessons I have learnt along the way — this is not a perfect guide



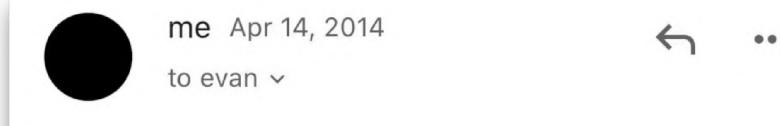












Hey, my name's Niraj Pant.

I understand your time is valuable. I'll only write three bullet points.

Programming since 8th grade.

Have most experience working in Java/Obj-C/Android/iOS.

Want to intern for Snapchat this summer as a high school junior. How?

Thanks, Niraj

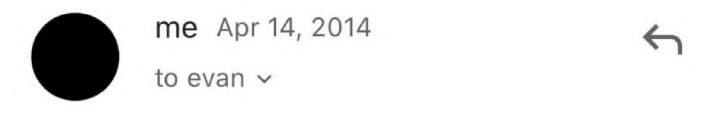


\(\cdot \)

Hey:) appreciate the brevity



2014



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Thanks, Niraj

- To the point
- No fluff



Hey:) appreciate the brevity

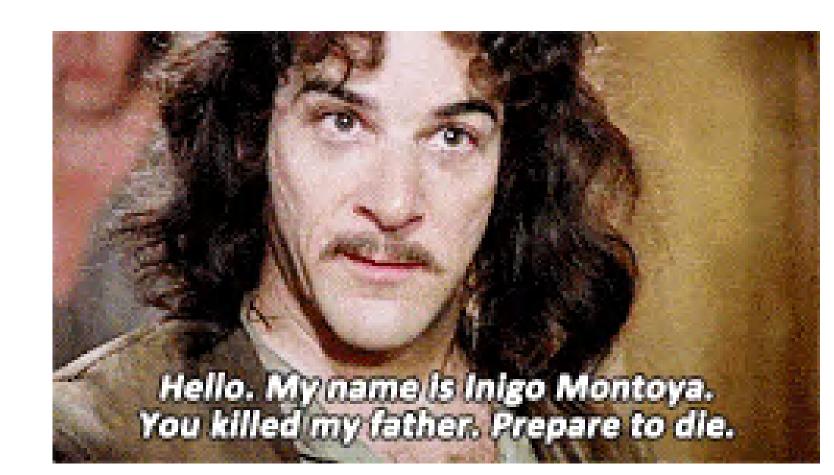


Structure

- Meaningful Subject line
- Greeting
 - Dear Prof. John/ Dear John
 - Dear Dr. Doe
 - Dear Sir/Ma'am, Respected Ma'am/Sir
- Introduction
 - My name is Inigo Montoya, I am your father
- Context/ Connection
 - Purpose What is it regarding?
- Call to action
 - What do you want?
 - A request for a meeting, Answer to a question etc
- Salutation



ALWAYS thank people for their time!



Do's and Don'ts

Do your Background Research

 Look at <u>Danish Pruthi</u>, <u>Marteen Sap</u> and <u>Maria Antoniak</u>

Know their Work

Short and Clear (Points, not paras)

Attach Resume/ CV/ Portfolio

✓ Show — Don't Tell

Mass Approaches — (always target)

ChatGPT—fied - (no fluff)

Inconsistent Formatting (fonts, sizes etc)

Misspelled Names

Mon't follow-up too quickly

Don't praise too much, no generic statements



Monojit Choudhury · Following

Professor of NLP at MBZUAI, ex-Microsoft Research, ex-Microsoft Turing 7mo • Edited • (\$\mathbb{G}\$)

This has to be the most oddly misspelled version of my name Honestly, I don't mind my name getting mangled—it's usually good for a laugh. But on a job application? That's playing with fire (I can confirm though that in this case it didn't matter. Just gave me a chuckle.)

Dear Professor Monjoit Choundharu,

I hope you are doing well. I am writing to kindly follow up regarding my postdoctoral application to the NLP department at



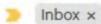




https://rachitbansal.github.io/img/danish-email.png



Health Misinformation on WhatsApp > Inbox x





Wed, Apr 23, 2:24 AM



Aatman Vaidya <aatmanvaidya@gmail.com>

to Kiran, kiran.garimella 🕶

Dear Prof. Kiran, I hope this finds you well.

My name is Aatman Vaidya, and I am currently based in India, working as a SDE/Researcher at Tattle, where I help build open-source tools and datasets to understand and respond to hate speech and misinformation in an Indian context.

I am writing to kindly request your mentorship on a research project. I want to understand the spread of health-based misinformation on Whatsapp in India. While reading fact-check reports and browsing social media, I've frequently come across cases of health-related misinformation beyond COVID-19—many of which appear to be and are potentially harmful. I hence got interested to look at its spread on online platforms. Below is rough outline of some things I am interested in looking at:

<u>RQs</u>

- The overlap of health based misinformation between closed networks (whatsapp) and broadcast mediums (youtube, instagram etc)
- · Modality of health related content on closed networks. Contrast with other categories such as political content, news etc.
- . What % of this is fact-checked? Did the misinformation prevalence reduce after the fact-check was published? Methodologically, how do you connect fact check reports to images/videos?
- . What kinds of narratives are popular when talking about health on social media? Which aspects of health (hygiene, prevention, medicine etc) co-occur with health related misinformation? Or what is the larger narrative being pushed?
- How to provide insight into response strategies both in terms of modality of response as well as platform/user action.

For data collection, existing whatsapp/youtube datasets could be used and also new data could be sourced. And the factcheck reports could be collected from the Healthy Indian project, First Check, Boomlive Health, Factly health etc

Would you have some time to provide me some mentorship on the project? especially with respect to methodology. I would be extremely grateful for any advice you could offer in terms of scoping the project down, or how to move ahead etc. The reason I'm reaching out is because I've found it quite difficult to find academic mentorship to work on such problems.

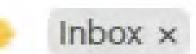
If this project aligns with your interests and current work, would you be available to briefly speak and discuss it further at a time that's convenient for you? Here is my CV - https://aatmanvaidya.github.io/assets/cv 2.pdf

Thank you for your time and consideration. Looking forward to hearing from you



Regards,

Subject Health Misinformation on WhatsApp







Aatman Vaidya <aatmanvaidya@gmail.com> to Kiran, kiran.garimella ▼ Apr 23, 2025, 2:24 AM







Dear Prof. Kiran, Salutation
I hope this finds you well.

My name is Aatman Vaidya, and I am currently based in India, working as a SDE/Researcher at <u>Tattle</u>, where I help build open-source tools and datasets to understand and respond to hate speech and misinformation in an Indian context. Intro



I am writing to kindly request your mentorship on a research project. I want to understand the spread of https://example.com/health-based/misinformation.on/whatsapp in India. While reading fact-check reports and browsing social media, I've frequently come across cases of health-related misinformation beyond COVID-19 —many of which appear to be and are potentially harmful. I hence got interested to look at its spread on online platforms.

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For data collection, existing whatsapp/youtube datasets could be used and also new data could be sourced. And the factcheck reports could be collected from the Healthy Indian project, First Check, Boomlive Health, Factly health etc

Research Problem







Would you have some time to provide me some mentorship on the project? especially with respect to methodology. I would be extremely grateful for any advice you could offer in terms of scoping the project down, or how to move ahead etc. The reason I'm reaching out is because I've found it quite difficult to find academic mentorship to work on such problems.

If this project aligns with your interests and current work, would you be available to briefly speak and discuss it further at a time that's convenient for you?

Call to Action

Here is my CV - https://aatmanvaidya.github.io/assets/cv 2.pdf

Thank you for your time and consideration. Looking forward to hearing from you

Regards,

Aatman

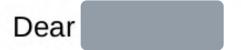


Pre-Doctoral Research Associate Application

4 messages

Aatman Vaidya <aatmanvaidya@gmail.com>

Mon, Nov 11, 2024 at 8:30 AM



Intro and Context

In reference to your LinkedIn post, kindly find my application for a <u>Pre-Doctoral Research Associate</u> below.

My research interests broadly lie in Network Science and NLP, in using computational methods to study societal phenomena. I am interested in understanding the biases and harms of language models and developing interventions to mitigate them particularly in the context of social media.

Here is a brief about my research and current work:

- I am a SDE and Researcher at Tattle, where I contribute to building open-source tools and datasets to understand and respond to hate speech and misinformation in an Indian context.
- I help build a browser extension called Uli, that helps you redact abusive content from your online feed. Uli
 de-normalizes the everyday violence that people of marginalized genders experience online in India.
- I work on a national-level WhatsApp helpline that helps curb <u>misinformation</u> and <u>deepfakes</u> around the Elections in India. I build data pipelines to analyse multi-modal data to detect thematic social media labels (politics, devotional content, memes etc) and extract claims (identifying key information and factual content from media).
- I work with Prof. Aditya Joshi from UNSW Sydney, to improve content moderation systems for Indian languages. We created a new dataset and approached the problem as a collection of subtasks like hate, toxicity, sexism, gender-based violence etc.
- I have rich experience in working with large-scale datasets, understanding information flow over a social network, tracking the spread of hate on Indian social media platforms, as well as research experience in NLP.

Research Exp

Going forward, I am interested in the following research questions/areas

Future Research Q's

- How do biases originate from foundational models and how do these biases create downstream representational harms?
 - How can we develop evaluation datasets to more effectively assess LLMs for online harms and biases?
 - How do we make LLMs more inclusive, safe and socially aware by embedding sociocultural understanding into them?
- Improving content moderation for online spaces/communities
 - How do we improve moderation by incorporating broader contextual information—such as the context
 of posts, comments, and platform rules, as well as the implicit meaning of words within sentences?
 - I'm interested in improving methods to detect coded language (dog whistle communication)
- Re-designing social media algorithms to reduce online harms and bias
 - I want to understand how algorithms reward polarising, harmful content? What strategies might be
 effective for re-ranking algorithms to reduce online harm and suggest better civic content?

CV - https://aatmanvaidya.github.io/assets/cv_2.pdf
Tentative Start Date - 1st week of January, 2025
Application for the Position - Pre-Doctoral Research Associate
Time Duration - Roughly 1 year
Code Samples

- Clustering large amounts of videos into thematic social media labels google colab
- I lead the development of Feluda, where I build workflows to analyse (github) and cluster (github) media items.

Please let me know if there's any additional information I can provide to help you assess my fit for the role better. Thank you for your time and consideration

Subject



Aatman Vaidya <aatmanvai... Mon, Apr 21, 12:49 AM ☆ ⓒ ← :
to Ashwin, arajades ▼

Dear Prof. Ashwin,
I hope this finds you well.

Formal Greeting

My name is Aatman Vaidya, and I am currently based in India, working as a SDE/Researcher at <u>Tattle Civic Tech</u>.

Intro and Context

I am writing to express my interest in the <u>Predoctoral Researcher</u> position in your lab. I had the opportunity to interview for a similar position last time as well. Kindly find my application materials attached below.



Here is a bit about what I have/am working on (and also what has changed since the last time):

- At <u>Tattle</u>, I contribute to building open-source tools and datasets to understand and respond to **hate speech** and **misinformation** in an Indian context.
- For my undergraduate thesis, we proposed a model to map the spread of toxicity on a social network. Did a thorough empirical analysis to show that existing models were insufficient to model hate speech.
- I work on a national-level <u>WhatsApp helpline</u> that helps
 curb <u>misinformation</u> and <u>deepfakes</u> around the Elections in India. I
 build data pipelines to analyse multi-modal data to detect thematic
 social media labels (politics, devotional content, memes etc)
 and <u>extract claims</u> (identifying key information and factual content from media).
- I help build a browser extension called <u>Uli</u>, that helps you redact
 abusive content from your online feed. Uli de-normalises the everyday
 violence that people of marginalised genders experience online in
 India. As a part of this work, I also evaluated existing NLP systems to
 work on coded hate speech or dog-whistle communication.
- I have worked with <u>MLCommons</u> to develop an **AI safety** benchmark <u>dataset</u> for <u>hate and sex related crimes</u>. As a part of this project, I also conducted a <u>survey on evaluating</u> Indic LLM for language performance.
- I work with Prof. Aditya Joshi from UNSW Sydney, to improve content moderation systems for Indian languages. We created a new dataset and approached the problem as a collection of subtasks like hate, toxicity, sexism, gender-based violence etc. (pre-print out soon).
- I am currently working on understanding the spread of health-based misinformation on WhatsApp and YouTube in India. I am looking at what kinds of narratives are popular when talking about health? what % of this is fact-checked? contrast with other categories such as political content. (work in progress)





<u>Application Materials</u>

CV - https://aatmanvaidya.github.io/assets/cv_2.pdf
Letter of Interest - https://aatmanvaidya.github.io/assets/
docs/letter_of_interest.pdf

Application Materials

Academic Transcript - https://aatmanvaidya.github.io/assets/docs/academic_transcript.pdf

I really enjoyed reading your recent work on framing news coverage, modelling personal narratives in political discussions. Similar questions on how do algorithmic amplification and influencer networks shape political discourse and agenda-setting on social media platforms? How do political narratives emerge, evolve cross platform? would be also interesting to explore I feel.

Future
Research
Questions

Thank you for your time and consideration. Looking forward to hearing from you

Regards,

Aatman

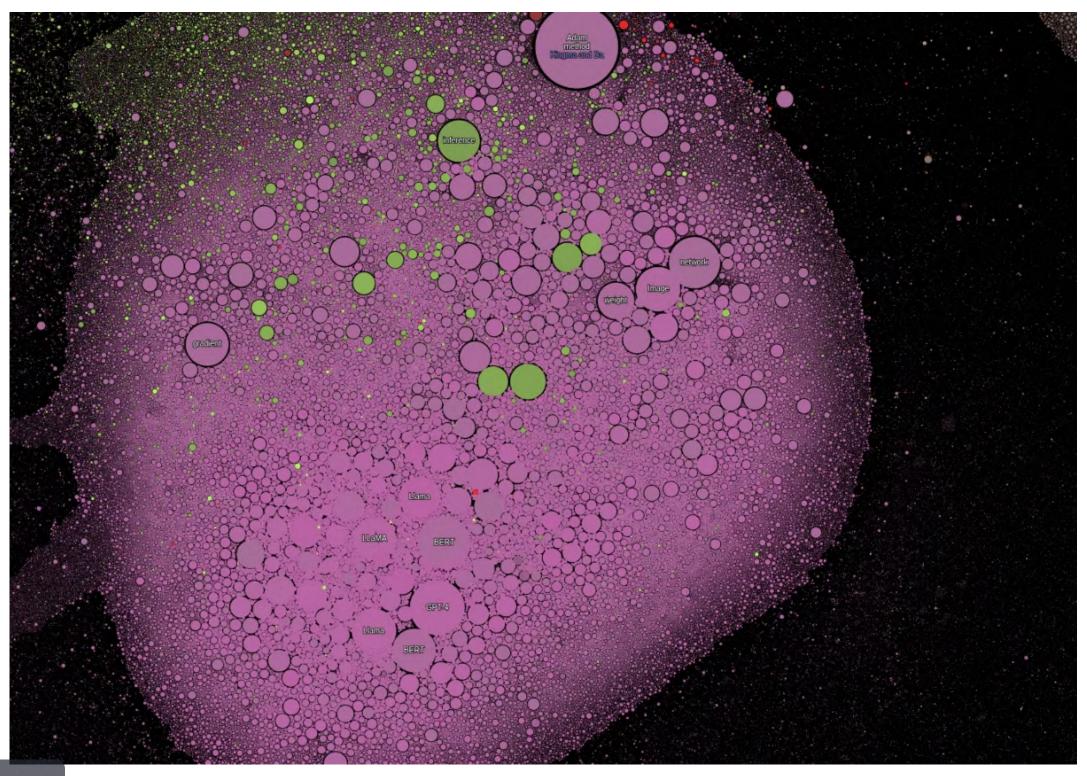


On Research and finding opportunities



What?

Research can often feel messy, confusing, and intimidating



My opinionated advice on doing research

Empirical research in AI,
NLP, Network Science,
and Computational Social
Science

t-SNE visualization of a small subset of papers in CS (from paperscape)

Instructions

Go to

www.menti.com

Enter the code

4981 2063



Or use QR code



What?

Research *literally* is about **reducing uncertainty** in **humanity's knowledge** about the world.

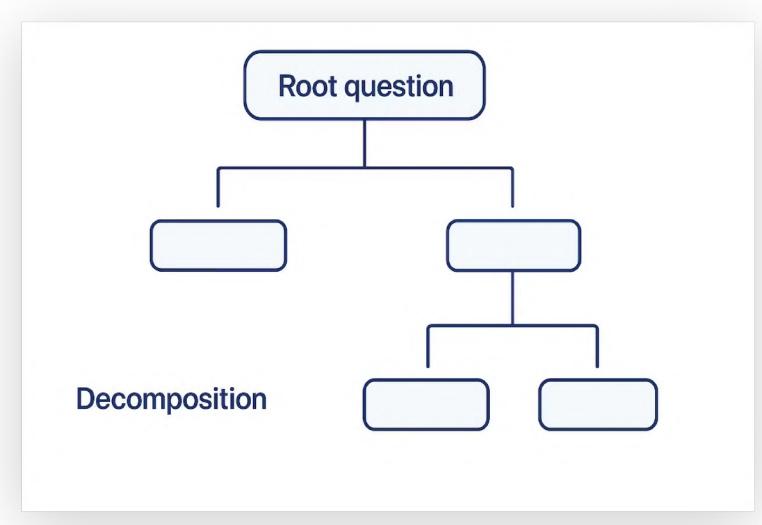
Its about exploring and solving problems whose solutions are **unknown** to us → helping answer more **uncertainties**

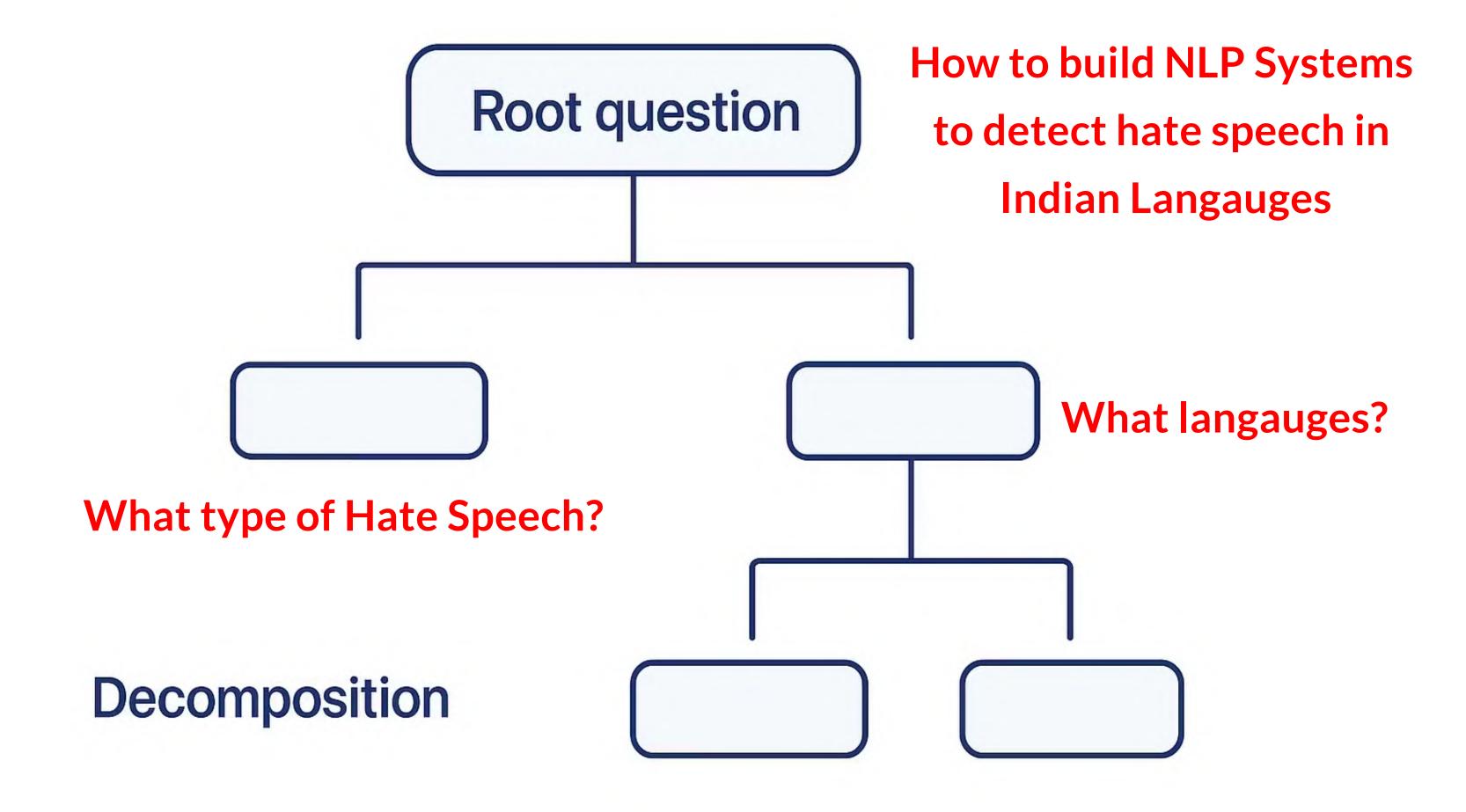
What kind of uncertainties matter and how to find them?

First step, find out the right uncertainty that matters to the community

Has it been done before? Is it your personal uncertainty or a shared one?

- 1. You start with a subfield or question
- 2. You branch it off to more and more aspects
- 3. You map what uncertainties exist at each node level







How to go from selected uncertainties to experiments?

much better to align with the problem instead of an idea or a solution

- 1. From research question, you select hypothesis
- 2. From hypothesis, you select experiments

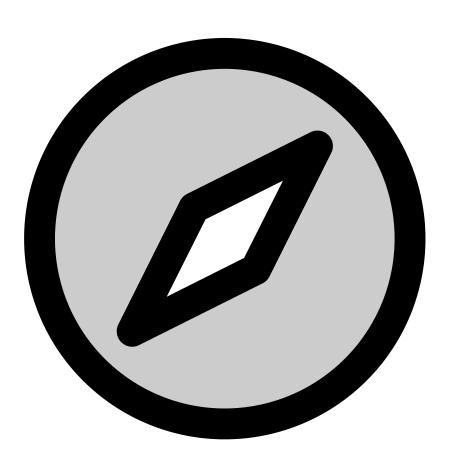
Stop your research project when you have one (or more) key message(s) that you can make evidence-based claims on.



Research is personal

You should reflect on how deeply you have shaped when you struggle with a difficult question and finally find a satisfying conclusion.

Why does this matter to you?





How to get started in India?

Academic vs Industry Research

- 1. Work as an RA at a Lab/ under a Prof
 - a. Cold Email
 - b. Keep a look out on open positions
 - c. NLP: Danish Pruthi, Tanmoy Chakraborty
- 2. Industry Opportunities
 - a. PreDoc/Research Fellow Google, Microsoft, TCS, Adobe
 - b. Reserach Engineer roles at MNCs/Startups



How to get started in India?

- 3. What to do in nothing is working out?
 - a. Read, Read, Read → Implement, Implement, Implement
 - b. Keep reaching out to PhD students and Post Doc's
 - c. Start writing Workshop paper's
 - i. Survey Papers
 - ii. Position Papers
 - d. Shared Task Papers
 - i. SemEval, CoNLL, CLEF, NeurIPS/ICLR competitions, ICWSM, ACL, EMNLP, AACL, NAACL
 - e. Volunteer at Academic Conferences
 - i. IndoML, ICON etc Online (remote)



QnA



https://aatmanvaidya.github.io/





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Create a presentation (It's free)