**SIH - Speech Transcript**

**Team: Cyber Knights**

**What we do: parsing social media feed**

**INTRODUCTION - kaushal**

**Idea proposal - prerana**

**Technical approach - Manchan  
Feasibility - Aishik**

**Impact - abhinav**

**Research - nidhi**

**Closure - kaushal**

**Kaushal: Greetings to esteemed Jury and my fellow innovators**

**We are cyber knights, a group from the first year**

***\*pause\****

**Yea we rose early and took the opportunity in the second week of our college**

**Anyway , Our goal is to ease digital forensic ,**

**Our projected was suggested by NIA , to develop a algorithm to summarise a criminals social media presence**

**That’s why we’re here. Our team has developed an innovative solution to automate social media data collection and analysis, taking all that manual work off investigators' hands and putting it into the capable ‘hands’ of AI.**

**AND how exactly we managed to do it??  
  
 let me pass the mic over to Prerna to walk you through the core idea behind this**

***\*exits*\***

**Prerna : (i got stuck help) , "Thank you, Kaushal!   
  
So, imagine you’re an investigator staring at a criminal’s social media account.**

**Wouldn't yall get bored?? like it's a never-ending homework Frustrating, right?**

**Dont worry our project will do that for you while you sip your specially brewed coffee**

**Here’s the concept: after logging into a suspect’s social media account, the tool runs in the background,It automatically scans followers, likes, DMs, comments, saved posts, and even geolocations. It also captures screenshots—because if it’s not documented, it’s just a “false story!"**

**But the real magic lies in how this data is handled. The tool organizes everything into a human-readable PDF report with sections for each category. On top of that, we’re using Generative AI to create a concise summary for investigators—because why not??**

**In short its a digital sherlock holmes , let me invite manvith to explain about the tech stuff**

***\*exits*\***

**Manchan: (\**chuckles*\* im in danger) I love that—‘digital Sherlock Holmes’—I might put that on my LinkedIn. Now, let’s get into how this actually works**

**Well it all starts by clicking pictures , we embedded two major domains of ai ,   
  
cv and nlp   
  
computer vision libraries like Opencv to take pictures and recognize interested text and nlp libraries like spacy and GPT to analyze DMs and comments and identify patterns, and even flag suspicious keywords based on investigator-defined criteria.**

**Additionally using GPT we are sorting content by relevance and sentiment.**

**and our standalone feature which tries to find the location of a selected image by using geoguessr ai**

**We’ve also made it so the tool to cross-reference this data with other platforms—so if the suspect is sneaky and using multiple social media accounts, we’ll pull in all that info too.Oh, and here’s the best part: when all this data is crunched, our tool doesn’t just spit it out like raw code. It organizes it into a neat, printable PDF report, with a Generative AI summary  
  
To manage all this data efficiently, we’re using a hybrid cloud approach. We have a backend built on Flask or Django, paired with PostgreSQL for database management, ensuring fast and secure data storage  
  
For managing all of this, we’re leveraging Docker for containerization, making the app highly portable and easier to deploy across different environments—whether investigators are working on Windows, Linux, or macOS.  
  
So, whether we’re pulling a contact list, highlighting suspicious DMs, or generating a summary of the entire account’s activity, the tech stack ensures it’s all done with precision and speed.**

**“let’s hear from Aishik now, who will explain just how feasible all this is."**

**Aishik: \*"Thanks, Manchan. Now, I know what you’re thinking—‘This sounds too good to be true.’ But rest assured, it’s not sci-fi, it’s feasible and practical. Here’s why:**

**(no its not)  
  
We’re working with well-established technologies like NLP, computer vision, and machine learning—which, trust me, are no longer just buzzwords  
  
The good news? This means we can roll out this tool across platforms like Facebook, Instagram, Twitter, WhatsApp, Telegram, and others with relative ease. We’ve designed it to be adaptable to different APIs and platforms, so it’s a plug-and-play solution for investigators.**

**On top of that, we’ve thought about the processing power. All the heavy lifting—whether it’s analyzing the texts, generating reports, or tracking geo-locations—is handled in the background with minimal impact on system performance  
  
Helping the investigators make a impact on the case**

**Uh speaking of impact , abhinav ??**

**Abhinav: ye aishik. Now, let’s talk about why this tool matters and what kind of impact it will have.**

**Imagine the current process—manual data collection, sifting through comments, likes, and messages, trying to find the one clue that could make or break the case. It’s like searching for a needle in a haystack Our tool speeds up this process drastically by automating it.  
  
 This tool saves valuable hours—sometimes even lives.**

**And with features like cross-platform analysis, geolocation tracking, and real-time notifications, we’re putting the power of AI-driven insight right into the hands of law enforcement. It’s more than just a tool; it’s a game-changer in how investigations are done.**

**Now to know more on how exactly we came up with this , lets deep dive into research we put into this.  
  
let me hand it over to Nidhi**

**Nidhi: uff yall ever met a criminal ? well i never did. Then how would we know how to find one?  
Well yea we had the same doubt and we had to reach out**

**And so we did  
We reached out to NIA , Kerala crime department and also questioned 4 ex service men**

**We asked them jus 5 questions   
  
The following: 1. What is the most valuable, time-consuming, or difficult information to retrieve from a criminal's social media account?**

**2. How often do you find relevant information from a criminal’s social media, and which platform has yielded the most insights so far?**

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**3. Is there an existing tool you use for this purpose, and what are the main shortcomings or limitations of that tool?**

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**4. Are there any general patterns or specific types of data you tend to look for when analyzing a criminal's social media?**

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**5. How legal and private is the data you parse from these social media platforms? How is privacy maintained?**

**And then we added all these robust features, all based on the input from real investigators, to ensure our tool doesn’t just collect data—it makes it meaningful and usable.**

**kaushal:**

**\*"Thank you, Nidhi! So, there you have it—an AI-powered tool that’s about to make manual social media investigations a thing of the past. Whether it’s organizing data, flagging suspicious activity, or giving real-time insights, our solution does it all—and it does it quickly, efficiently, and intelligently.  
  
On behalf of team cyber knights , THANKYOU**