



**SILVER OAK
UNIVERSITY**
EDUCATION TO INNOVATION



IEEE

Silver Oak University
IEEE Student Branch



A REPORT ON
**GEEK OUT: CHATBOTS
AND LLM IN A DAY**

Date: 7th March, 2024

Venue: Apple Lab, Silver Oak University

EXPLORE THE WORLD OF DATA WITH VALUABLE INSIGHTS

GEEK OUT

CHATBOTS & LLM IN A DAY

LARGE LANGUAGE MODELS

GENERATIVE AI

Introduction:

ML Geeks Club, founded within the Silver Oak University IEEE Student Branch, aims to fuel the passion of machine learning enthusiasts and foster a community of individuals sharing similar interests. In its inaugural initiative, the club hosted a captivating member-exclusive event titled "**Geek Out: Chatbots and LLM in a Day**". The event aimed to delve deep into the realms of Chatbots and Large Language Models, offering participants an insightful journey through the intricacies of these cutting-edge technologies.

About the speaker:

This exciting event was conducted by the esteemed ML Geeks Leads:

1. Mr. Divyesh Patel, Advisory Student Board member at IEEE SOU SB and 8th - semester Computer Engineering student specializing in ML/AI.
2. Mr. Rushi Prajapati, Advisory Student Board member at IEEE SOU SB and 8th - semester Computer Engineering student specializing in ML/AI.

About the session:

Date: 7th March, 2024

Time: 11:00 AM - 04:00 PM

Venue: Apple Lab, Silver Oak University

Participants: 43

The session commenced with an elucidation of the term "ML Geek," denoting an individual deeply passionate about machine learning. The speakers, Mr. Rushi Prajapati and Mr. Divyesh Patel, emphasized the significance of platforms like ML Geeks Club and expounded on the club's primary objective of cultivating communities proficient in machine learning, natural language processing (NLP), and computer vision, driven by research and innovation.

Subsequently, participants delved into foundational concepts such as artificial intelligence (AI), machine learning (ML), and deep learning (DL), comprehending how mathematical algorithms facilitate machine learning processes. The attendees explored the progression of DL techniques in addressing intricate challenges within ML, particularly in domains such as involving chatbots and LLMs.

Furthermore, the session covered various NLP applications, including text summarization, sentiment analysis, and chatbots. Participants traced the evolution of chatbots from Eliza to contemporary models like ChatGPT-4, obtaining insights into its capabilities and limitations.

Additionally, they explored Large Language Models like RAG, comprehending their significance in advancing natural language understanding and generating coherent responses.

Following a brief intermission, participants engaged in an exciting hands-on technical session led by experts, who guided them through coding and syntax to develop a model offline while harnessing the capabilities of "PARAM Shavak," the supercomputer at Silver Oak University. The speakers then took the participants on a comprehensive journey through Anaconda and its libraries, serving as the foundation to lay the groundwork for building a large language model from scratch.

Each step was meticulously explained, from environment setup to leveraging essential libraries for data processing, machine learning, and natural language processing tasks. Through practical demonstrations and interactive sessions, the speakers elucidated the nuances of model architecture, training methodologies, and fine-tuning techniques, empowering students to embark on their ventures in language model development with confidence and proficiency.

Conclusion:

In conclusion, "Geek Out Chatbots and LLM in a Day" proved to be an enriching and insightful experience for all participants. Through engaging speeches, in-depth discussions, and practical demonstrations, attendees gained valuable insights into the intricacies of chatbots, large language models, and their applications in real-world scenarios. The event not only showcased the expertise of ML Geeks Club Leads but also reinforced the club's commitment to fostering innovation and excellence in the field of ML/AI.

This event saw success under the essential guidance and support of Dr. Satvik Khara, Dean, Diploma Engineering, SOU; Head, Department of Computer Engineering, SOCET; IEEE Senior Member; Chairperson, SIGHT, IEEE Gujarat Section; Secretary, Computer Society, IEEE Gujarat Section; and Founding Member, Silver Oak University IEEE Student Branch.

Glimpses of the event:



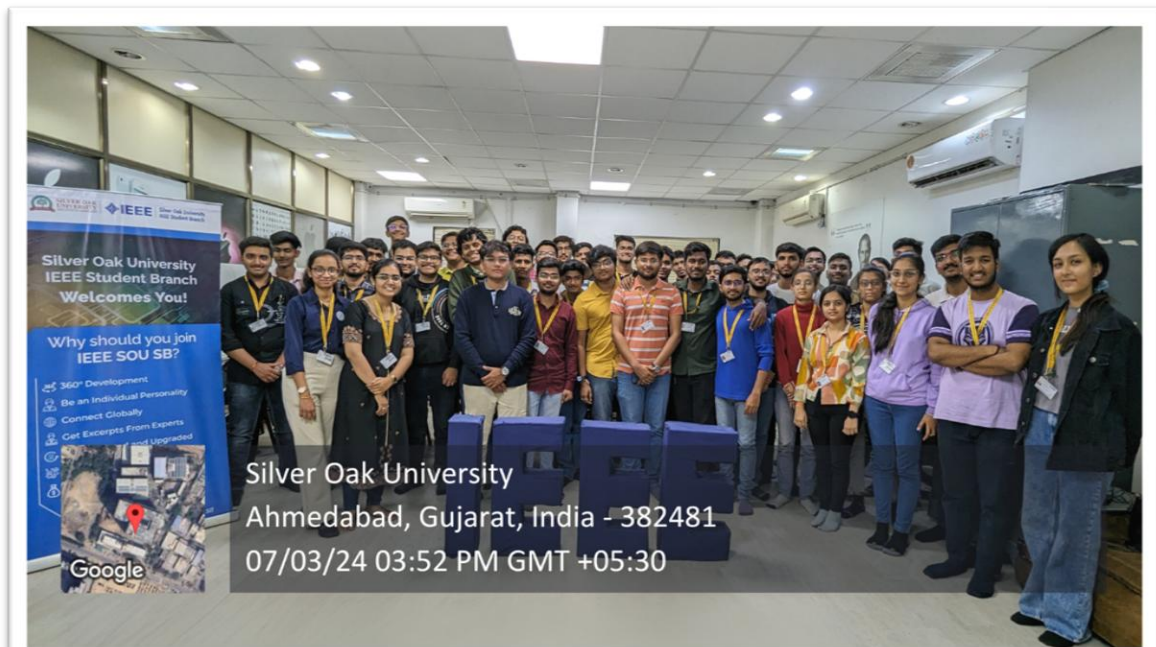
Briefing attendees on history of Artificial Intelligence



Solving queries about Anaconda libraries



Guiding members through code of LLM



Successful completion of the workshop