



# Faculty of Technology and Engineering

## Department of Computer Science and Engineering

Date: 22/09/2023

### Event Application No in E-governance:

**Event Name:** Expert Talk On Introduction to Generative AI with Google Cloud

### Detail about the event:

For students of the CSE department of Computer Science and Engineering, CSPIT, CHARUSAT planned an interactive Expert Talk on Introduction to Generative AI on September 22, 2023.

A total of 18 students from Semester 3 participated in the same. When all the students had reported at the CSE AI/ML LAB, we started the Workshop at around 2:20 P.M. At the very beginning of the session students seemed interested to dig deeper into the topic. The expert started the lecture by explaining very basic and real life examples such as chatGPT and other AI advancement tools that we use on a daily basis.

Thereafter he continued to explain the same topic on a technical level and how the industry of AI grew and shifted towards it. Furthermore he gave an idea about how Generative AI is a branch of AI. Compared it with the classical machine learning approach he explained how a machine learning task is different from text/image/music generation. After this , the foundation models were explained which are used to build a Generative AI model. The Revolution and LLM which stands for Large LAnguage Model were explained thoroughly.

To understand the input parameters given to any Generative AI model , prompts are an essential requirement. This topic was explained in depth to help students understand how to generate a prompt to get a perfect output as we want. Different types of prompt are explained nicely (shot prompts).In addition he explained about the evolution of cloud ML APIs which are providing multipurpose foundation models for AI models , and more concisely explained about Google cloud and how it can help in Gen AI's field. Vertex AI was also explained in depth.

At the end of this session,the expert provided links and QR codes for Github Repository of Generative AI and some other related links to understand Gen AI better and finally concluded with and fruitful discussion and doubt solving session.

**Outcome:**

1. Make students aware with Generative AI
2. Teach students how to work with Google Gemini and Bard for creating generative AI applications.

**Actionable insights of Event:**

Through this event

1. Students get exposure to the Generative AI models.
2. They can start their own small projects to build a small scale Gen AI model referring to the provided github links

**Attach applicable Annexure:**

1. Attach CV of expert
2. Photographs
3. Evaluation of Feedback

**CV of experts**

**1. Mr. Harshul Yagnik**

Designation: **Assistant Professor**

Institution/Company: Chandubhai S. Patel Institute of Technology, CHARUSAT.

Field Experience: **12+ Yrs.**

**Profile:**

Harshul Yagnik is working as an assistant professor in the department of computer science engineering at Charotar University of Science and Technology. He has more than 12 years of academic experience. He has done a master of engineering in signal processing and communication and presently pursuing a Ph.D. in the area of computer vision in part-time mode.

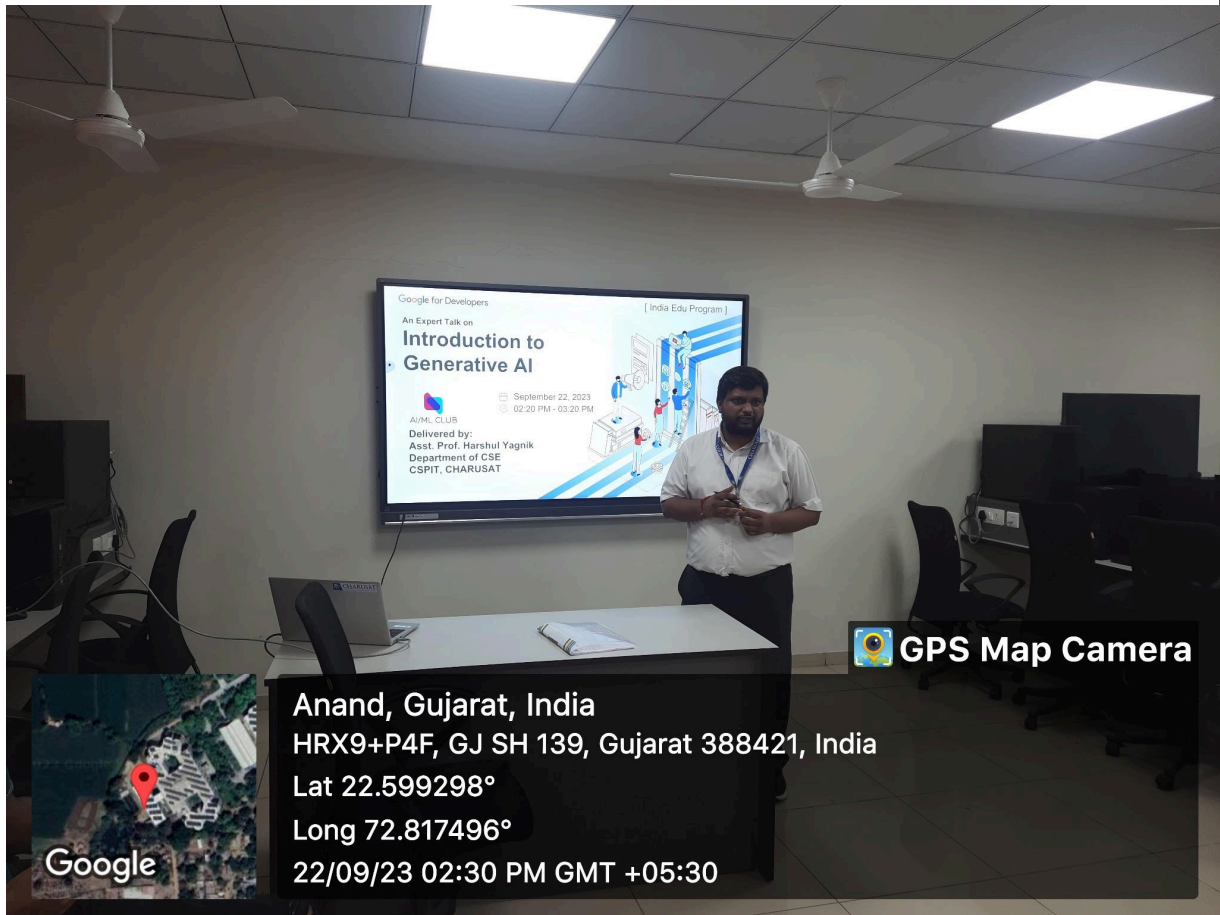
- He has received “IEEE Outstanding Branch Counselor and Branch Chapter Advisor Award 2019” from Institute of Electrical and Electronics Engineers, New York.
- His software skills include programming languages like Python, C, C++, VHDL, Verilog, JAVA along with application packages/tools like OpenCV, Tensorflow, Keras, Numpy, Pycharm, Matlab, Scilab, Android Studio, Xilinx, TI Code Composer Studio, AVR Studio, Microwind, NI LabView, Multisim and Orcad.
- He has working experience with hardware boards like ESP8266, ESP32, Raspberry Pi, TI DSPs TMS320 C5x, C6x & LF24x, Xilinx Spartan 3, Altera Quartus II, NI Elvis Boards, Intel 8085, 8086, and 8051.
- He has taught subjects Computer Vision, Fundamentals of Image Processing, VLSI Technology, and Design, Cryptography and Network Security, Information Theory and Coding, Digital Signal Processing for Power Electronics, Mobile Computing, and Wireless Communication, Research Methodology, Analog Circuit Design.
- He has guided student projects on Activity Recognition, IoT based Home Automation, Presence Sensing Light Controller, Arbitrary Waveform Generator, Solar-Powered Smart Trash Can and Smart Industrial Table.
- He has published one research paper in a journal and presented one in a conference on the topic of data compression along with one conference paper on the topic of multilevel inverter for photovoltaic systems.
- He has organized a total of more than twenty national/international technical festivals,

workshops, Seminars, congress, and expert talk series. He has delivered seven expert talks on topics of 5G, IoT, Robotics, and DSP Processors.

## Annexure- II

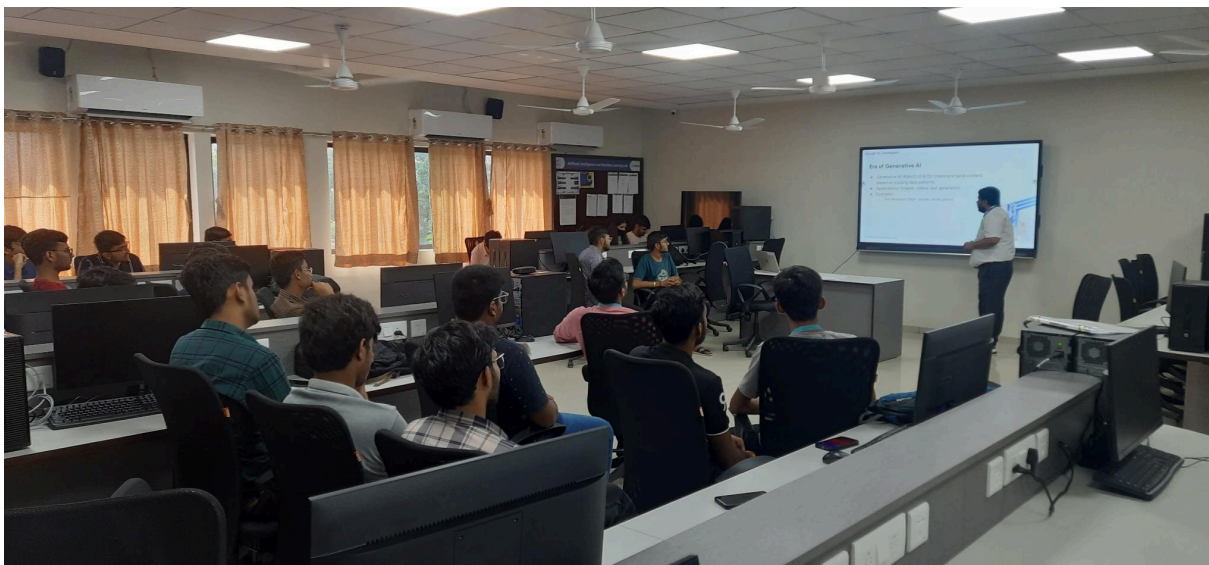
### Photographs with Caption

Photo-1



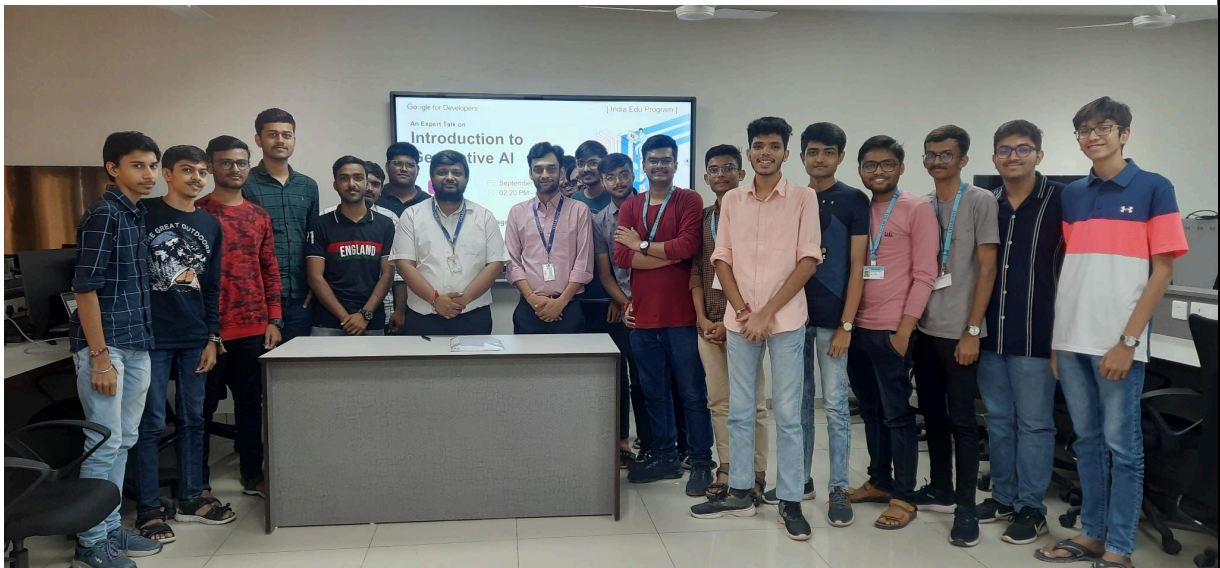
**Beginning of the Session  
(Date: 22/09/2023)**

Photo-2



**Student Interactions with the expert**  
**(Date: 22/09/2023)**

Photo-3



**Conclusion of the session with all participants  
(Date: 22/09/2023)**



## Evaluation of Feedback

Feedback was taken from the participants at the end of the talk. From the feedback form filled by the students, Evaluation of Feedback is as per given below:

### Evaluation of Feedback

**Name of Expert Talk:**Expert Talk on Generative AI

**Resource Person:** Mr. Harshul Yagnik

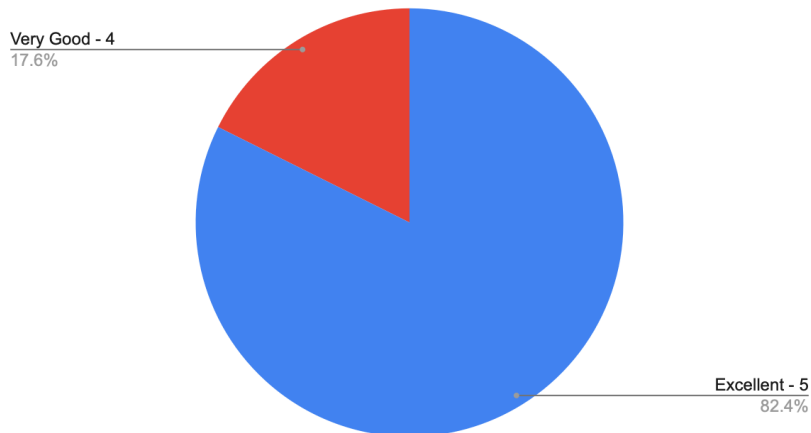
**Date:** 22-09-2023

**Time:** 12:20 AM to 02:20 PM

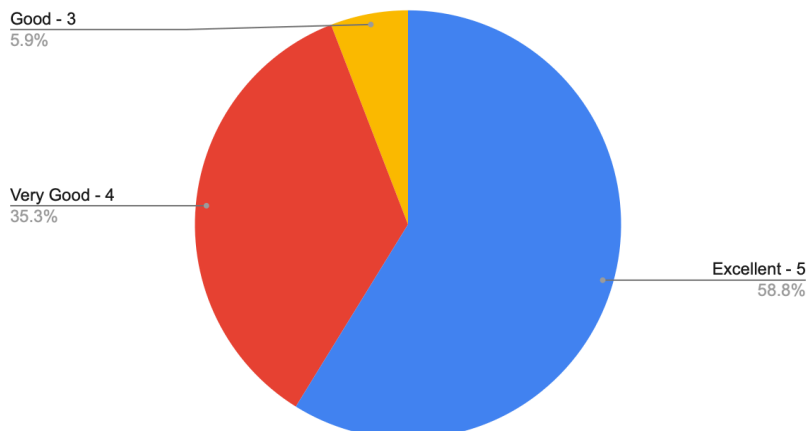
**Venue:** CSE AI/ML Lab (Room Nos:638), A7 Building, CSPIT.

\*Percentage values are rounded wherever required

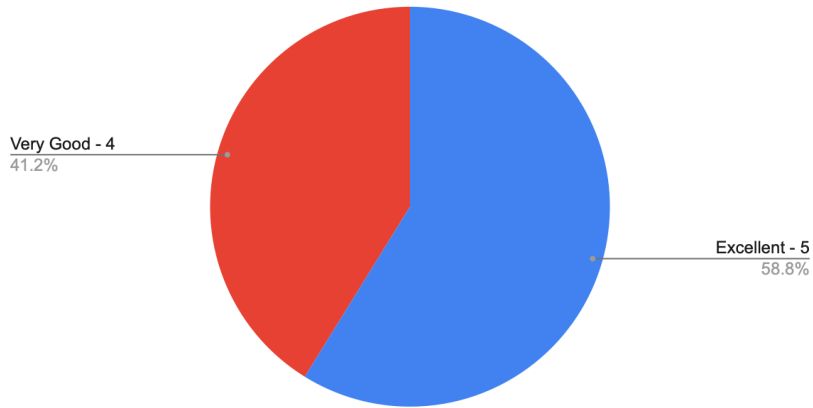
Count of Content of Workshop



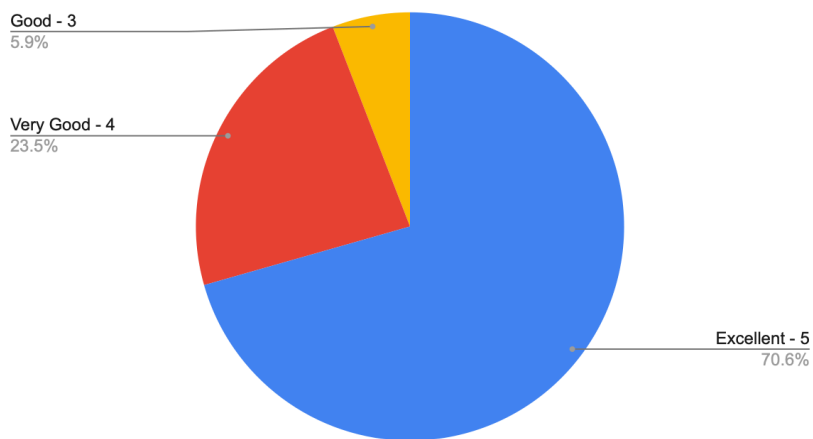
Count of Relevance to industry/research requirements



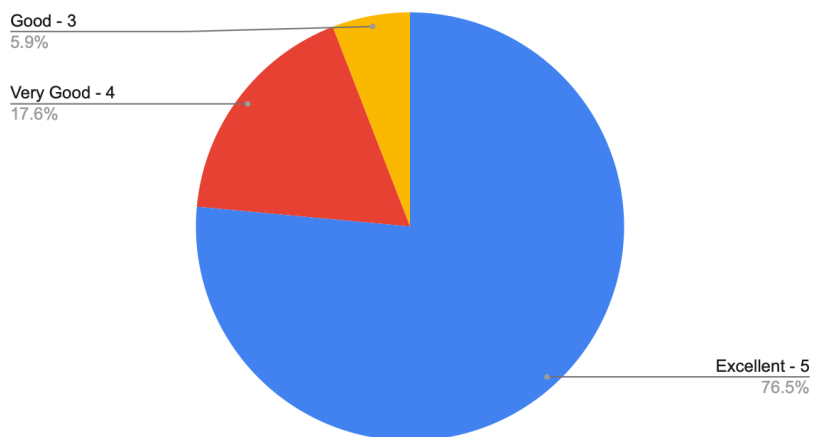
Count of Sufficient reading materials and digital resources provided



Count of Incorporation of advanced topics

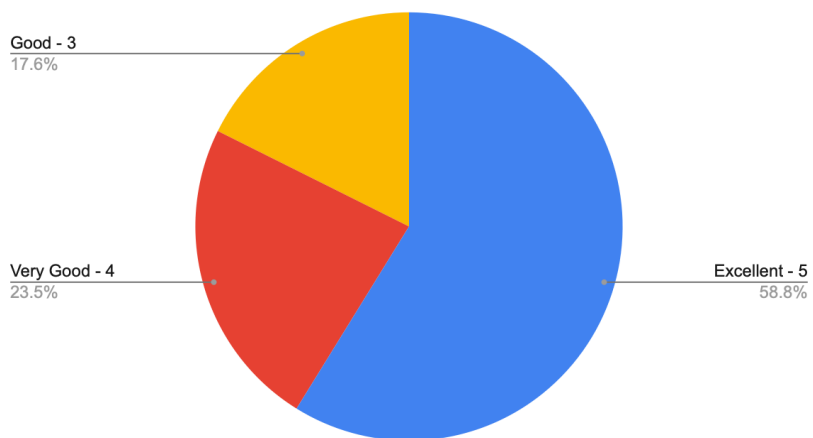


Count of Pedagogy proposed

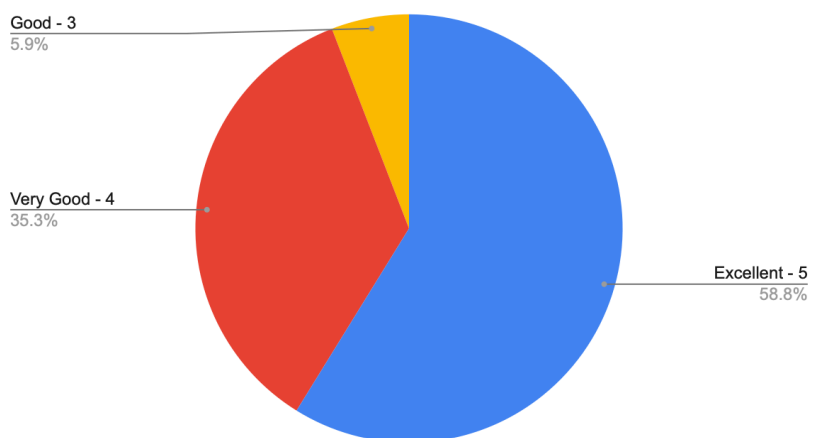




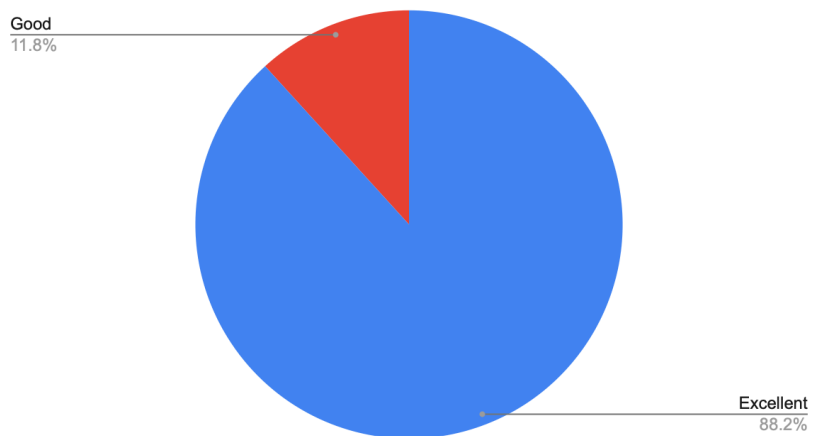
Count of Have a desired balance between theory and practical



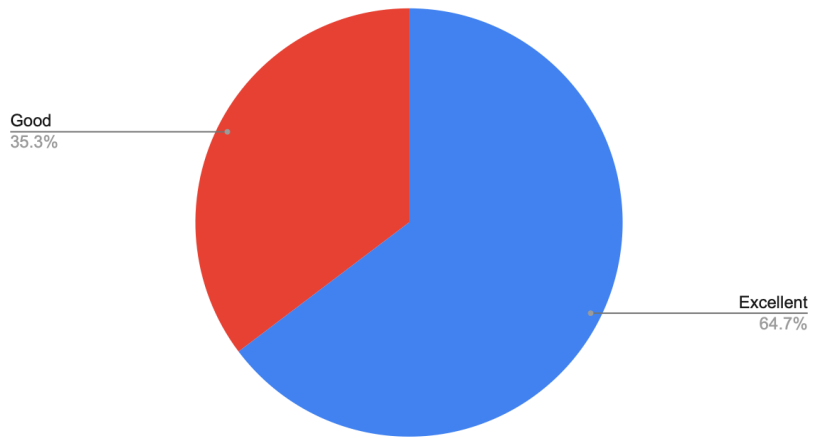
Count of Industrial training/ practical exposure



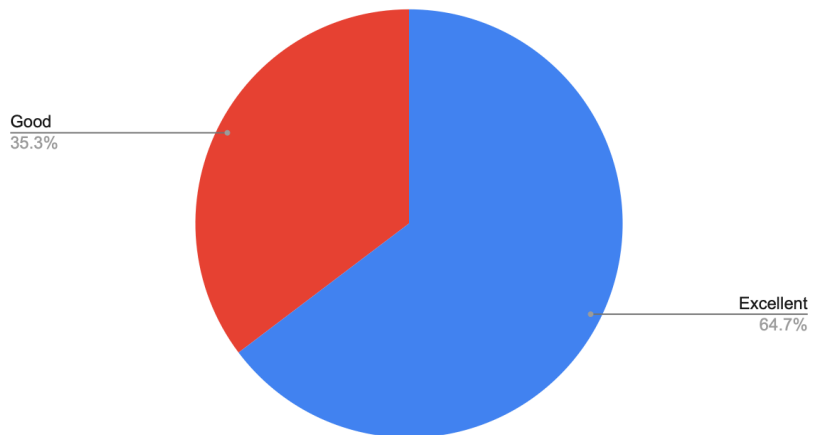
Count of The content of workshop



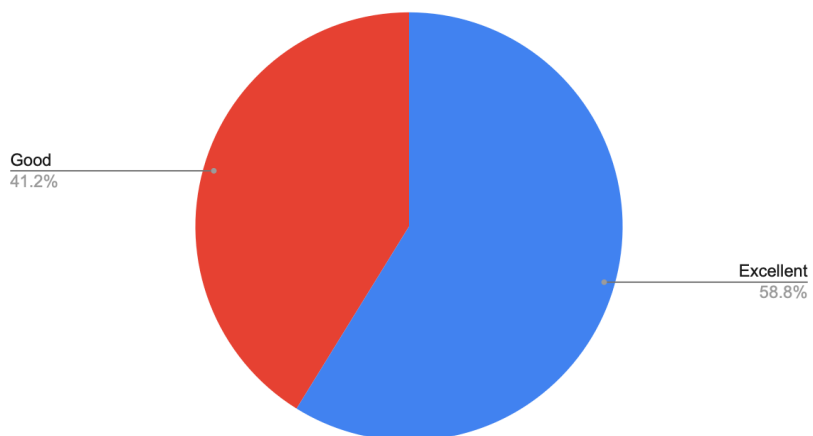
Count of Response to Questions / Queries by Expert



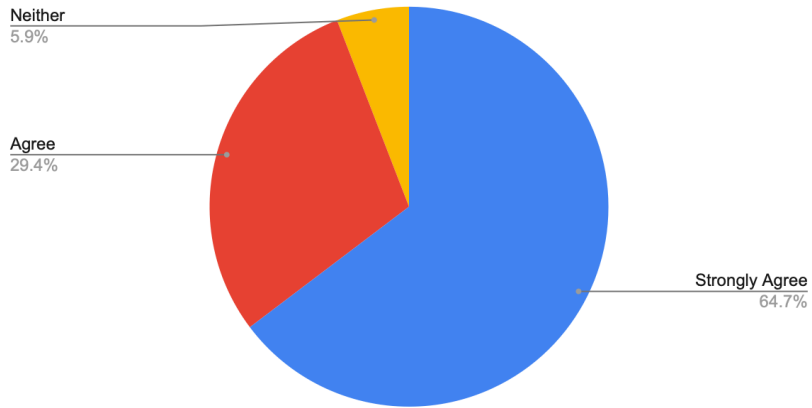
Count of Innovativeness



Count of Overall Impact



Count of After attending the workshop, are you able to understand use of Generative AI?



Count of Can you explain Applications of Generative AI?

