

# **SHORT-TERM INTERNSHIP (VIRTUAL)**



**GODAVARI INSTITUTE OF  
ENGINEERING & TECHNOLOGY(A)  
2024-2025**

**PROGRAM BOOK FOR**

# **SHORT-TERM INTERNSHIP**

**(Virtual)**

**Name of the student:** NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI

**Name of the college:** GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY

**Registration Number:** 23555A0508

**Period of Internship:** 8 WEEKS

**from:** 15/05/2024

**To:** 15/07/2024

**Name & Address of the Intern Organization:**

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# **An Internship Report on** **ARTIFICIAL INTELLIGENCE**

*Submitted in accordance with the requirement for the degree of*

## **BACHELOR OF TECHNOLOGY**

*Under the Faculty Guideship of*

**MR. V. AJAY KUMAR**  
Assistant Professor

*Department of*  
**COMPUTER SCIENCE & ENGINEERING**

*Submitted by:*

**NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI**

**Reg.No:23555A0508**



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A)**  
**CHAITANYA KNOWLEDGE CITY, NH-16, RAJAHMUNDRY, AP, INDIA**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, KAKINADA,**  
**A.P, INDIA**

## Student's Declaration

I, **NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI** a student of **3<sup>rd</sup> B.TECH 1<sup>st</sup> SEMESTER** Program, of **REMOTE INTERNSHIP PROGRAM** Reg. No.**23555A0508** of the Department of **COMPUTER SCIENCE AND ENGINEERING** College **GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY** do hereby declare that I have completed the mandatory internship from **15-05-2024** to **15-07-2024** in **AIMER Society** under the Faculty Guideship of **MR.V.AJAY KUMAR**, Assistant professor, Department of **COMPUTER SCIENCE AND ENGINEERING** in **GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY** College.

*(Signature and Date)*

# Official Certification

This is to certify that **NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI** Reg. No. **23555A0508** has completed his/her internship in **Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society)** on **ARTIFICIAL INTELLIGENCE** under my supervision as a part of partial fulfilment of the requirement for the Degree of **3<sup>rd</sup> YEAR B.TECH 1<sup>st</sup> SEMESTER** in the Department of **COMPUTER SCIENCE AND ENGINEERING** in **GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY**.

This is accepted for evaluation.

*(Signatory with Date and Seal)*

## Endorsements

*Faculty Guide*

*Head of the Department*

*Principal*

# Certification from Intern Organization



## ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION

(A Statutory Body of Government of A.P.)

### CERTIFICATE OF COMPLETION

This is to certify that Ms. Nalam Bhargavi Satya Seetha Naga Lakshmi (Reg. No. 23555A0508) from Godavari Institute Of Engineering and Technology, affiliated with JNTU Kakinada, has successfully completed a Short-Term Internship on Artificial Intelligence . The internship spanned 120 hours over 8 weeks and was organized by the Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) in collaboration with the Andhra Pradesh State Council of Higher Education.

Place: Vijayawada  
Date: July 19, 2024  
Certificate ID: AIMERS-240856

*Sai Satish*

D. Sai Satish  
President, AIMER Society

This Certificate can be verified at [www.AimerSociety.com](http://www.AimerSociety.com)

## ACKNOWLEDGEMENT

It gives me a great sense of pleasure to present the report of the B. Tech Summer Internship Program undertaken during B. Tech third year. I own special debt of gratitude to my guide and also HOD **Dr. B. SUJATHA**, Department of **COMPUTER SCIENCE & ENGINEERING**, **GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RAJAHMUNDRI** for her constant support and guidance throughout the course of my work. Her sincerity, thoroughness and perseverance have been a constant source of inspiration for us. I would like to express our deep sense of gratitude to **Dr. N. LEELAVATHY, Vice principal for Academics** and **Dr. P.M.M.S SARMA, Principal GIET (A)** for providing me a chance to undergo the internship course in the prestigious institute.

I am grateful to my guide **MR.V. AJAY KUMAR** Assistant Professor for given the opportunity to carry out this Internship program. I take this opportunity to express my profound and whole heartfelt thanks to my guide, with his patience support and sincere guidance helped me in successful completion of the Internship program.

I also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind assistance and cooperation during the development of my internship program.

My special thanks to the Management of my college for providing necessary arrangements to carry out this internship program.

Submitted by

**NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI**

**23555A0508**

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# **ABSTRACT**

## **(ARTIFICIAL INTELLIGENCE)**

This Report discusses the Summer Internship Program at Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) During the period from 15-05-2024 to 15-07-2024. It states the concept of Generative AI and Cyber Security. It provides an overview of the organization; an overview of my role and the projects I worked on during the internship program at the organization It shows a brief background about the place of Internship. It mentions some facts about the organization that was responsible for the internship program. This Report describes about the history, characteristics, overview and concepts of the Generative AI and Cyber Security.

Artificial Intelligence is a branch of artificial intelligence (AI) focused on enabling machines to learn from data and improve their performance over time without being explicitly programmed. It's a process of training algorithms to recognize patterns in data and make decisions or predictions based on that recognition

# CHAPTER 1

## EXECUTIVE SUMMARY

### Introduction:

I completed an internship at **AIMER SOCIETY** as Artificial Intelligence from **15/05/2024** to **15/07/2024**. During this period, I gained valuable experience and knowledge in Artificial Intelligence.

### Internship organization:

The Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) stands as a premier professional organization at the forefront of the advancement of Artificial Intelligence (AI) within the realms of medical and engineering research. This esteemed society is committed to driving innovation and excellence in AI by fostering a collaborative environment among researchers, practitioners, and students from diverse backgrounds and disciplines.

### Summary of Activities:

A Artificial Intelligence system builds prediction models, learns from previous data, and predicts the output of new data whenever it receives it. The amount of data helps to build a better model that accurately predicts the output, which in turn affects the accuracy of the predicted output. The demand for Artificial Intelligence is steadily rising. Because it is able to perform tasks that are too complex for a person to directly implement, Artificial Intelligence is required. Humans are constrained by our inability to manually access vast amounts of data; as a result, we require computer systems, which is where Artificial Intelligence comes in to simplify our lives.

### Conclusion:

After completing a AI project, you'll have a robust knowledge on how different AI tools work, easy access and a user-friendly applications. It promotes a huge features , making it maintainable and scalable. It will provides instant applications and datasets to various tasks like image identification , object detection ,etc...

## **1. Internship Objectives:**

### **➤ Primary Goal:**

- To apply theoretical knowledge in a practical environment and gain hands-on experience in GENERATIVE AI AND CYBER SECURITY.

### **➤ Secondary Goals:**

- To understand the organizational structure and workflow
- To develop professional skills such as communication, teamwork, and problem-solving.

## **2. Key Responsibilities:**

- Assisted in Artificial Intelligence, including Yolo , Power Bi ,Chatbot ,Talking Parrot, Ai Models and etc.
- Conducted research on Artificial Intelligence, which involved AI Models and etc...
- Collaborated with AIMERS to get knowledge about Artificial Intelligence

## **3. Major Achievements:**

- Successfully completed Yolo, Power Bi, Chatbot, Talking Parrot, Ai Models and etc... which resulted in object detection, to turn your unrelated sources of data into coherent, visually immersive, and interactive insights.
- Developed Generative AI, Image and Video Generation, Music and Audio Generation, Model Deployment and Optimization, and etc..
- Contributed to persuade, inform, inspire, or entertain the audience.

## **4. Skills and Knowledge Gained:**

- Technical Skills: Enhanced proficiency in Chatgpt , Hugging Face, Pycharm, Roboflow and etc...
- Professional Skills: Improved problem-solving skills, the ability to work in a team, a strong work ethic, analytical and quantitative skills, communication skills, and leadership qualities.
- Industry Knowledge: Gained insights education, training, experience, and ongoing research and etc..

## **5. Challenges and Solutions:**

Faced challenges such as Time Management, Lack of Practical Experience which were addressed by Prioritize tasks using tools like to-do lists or project management software, break tasks into smaller manageable parts, and set realistic deadlines, Engage in hands-on projects, seek guidance from mentors, and participate in coding boot camps or hackathons to gain real-world experience.

## **6. Conclusion:**

The internship at AIMERS has been a highly enriching experience, providing valuable insights and practical skills that will be instrumental in my future career. The exposure to Artificial Intelligence and the opportunity to work on Yolo, Power Bi, Chatbot, Talking Parrot, Ai Models and etc have significantly contributed to my professional and personal growth.

## **7. Acknowledgements:**

I would like to extend my gratitude to SAI SATISH SIR for their guidance, support, and encouragement throughout the internship. Their expertise and feedback have been invaluable in shaping my learning experience.

## **CHAPTER 2**

### **OVERVIEW OF THE ORGANIZATION**

#### **About AIMER:**

##### **Details about AIMER Society**

**Name:** Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society)

##### **Overview:**

The Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) stands as a premier professional organization at the forefront of the advancement of Artificial Intelligence (AI) within the realms of medical and engineering research. This esteemed society is committed to driving innovation and excellence in AI by fostering a collaborative environment among researchers, practitioners, and students from diverse backgrounds and disciplines

##### **Mission:**

The mission of the AIMER Society is to promote the development and application of AI technologies to solve complex medical and engineering problems, improve healthcare outcomes, and enhance engineering solutions. The society aims to bridge the gap between theoretical research and practical implementation, encouraging interdisciplinary collaboration and real-world impact.

##### **Objectives:**

- To advance research in AI and its applications in medical and engineering fields. - To provide a platform for researchers, practitioners, and students to share knowledge and collaborate on AI projects.
- To organize conferences, workshops, and seminars for the dissemination of AI research and knowledge.

- To support the professional development of AI researchers and practitioners through training programs, certifications, and networking opportunities. - To foster ethical AI practices and address societal challenges related to AI deployment.

### **Key Activities:**

- Conferences and Workshops: Organizing annual conferences, symposiums, and workshops that bring together leading AI experts, researchers, and practitioners to discuss the latest advancements and trends in AI.
- Research Publications: Publishing high-quality research papers, journals, and articles on AI technologies and their applications in medical and engineering fields.
- Competitions and Contests: Hosting AI model development and chatbot contests to encourage innovation and practical applications of AI among students and professionals. - Training Programs: Offering training and certification programs in AI and related technologies to enhance the skills and knowledge of members.
- Collaboration Projects: Facilitating collaborative projects between academia, industry, and healthcare institutions to drive AI innovation and practical solutions.

### **Membership:**

The AIMER Society offers various membership categories, including individual, student, and corporate memberships. Members gain access to exclusive resources, networking opportunities, and discounts on events and publications. The society encourages participation from AI enthusiasts, researchers, practitioners, and organizations interested in the advancement of AI technologies.

### **Leadership:**

The AIMER Society is led by a team of experienced professionals and experts in the fields of AI, medical research, and engineering. The leadership team is responsible for strategic planning, organizing events, and guiding the society towards achieving its mission and objectives.

### **Impact and Achievements:**

- Developed AI models for early diagnosis and treatment of medical conditions.

- Contributed to significant advancements in engineering solutions through AI technologies.
- Fostered a global community of AI researchers and practitioners.
- Organized successful conferences and workshops with high participation and impactful outcomes.
- Published influential research papers and articles in reputed journals.

**A. Introduction of the AIMER Organization:** The Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) stands as a premier professional organization at the forefront of the advancement of Artificial Intelligence (AI) within the realms of medical and engineering research. This esteemed society is committed to driving innovation and excellence in AI by fostering a collaborative environment among researchers, practitioners, and students from diverse backgrounds and disciplines.

**B. Vision, Mission, and Values of the AIMER Organization:** The mission of the AIMER Society is to promote the development and application of AI technologies to solve complex medical and engineering problems, improve healthcare outcomes, and enhance engineering solutions. The society aims to bridge the gap between theoretical research and practical implementation, encouraging interdisciplinary collaboration and real-world impact.

**C. Policy of the AIMER Organization, in relation to the intern role:** The policy of AIMER towards interns typically includes providing them with practical learning opportunities, mentoring, and exposure to the organization's operations. It may emphasize skill development, professional growth, and adherence to the organization's values.

**D. AIMER Organizational Structure:** The AIMER Society is led by a team of experienced professionals and experts in the fields of AI, medical research, and engineering. The leadership team is responsible for strategic planning, organizing events, and guiding the society towards achieving its mission and objectives.

**E. Roles and responsibilities of the employees in which the intern is placed:**

In pursuit of its mission, the AIMER Society organizes a wide array of activities and initiatives designed to promote AI research and development. These include annual conferences, symposiums, and workshops that bring together leading AI experts to discuss the latest advancements and trends. Such events provide invaluable opportunities for networking, collaboration, and professional growth.

**F. Performance of the AIMER Organization in terms of turnover, profits, market reach, and market value:**

As of my last knowledge I do not have access to real-time financial data or performance metrics for AIMER. The organization's performance would depend on various factors, including government funding, program success, industry partnerships, and the economic environment.

**G. Future Plans of the AIMER Organization:**

- Expand the scope of research and applications in AI to cover emerging fields and technologies.
- Increase collaboration with international AI societies and organizations.
- Enhance training and certification programs to meet the evolving needs of AI professionals.
- Promote ethical AI practices and address challenges related to AI governance and societal impact

**Contact Information:**

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## **CHAPTER 3**

### **INTERNSHIP PART**

During my internship at AIMER, I had the privilege to work on diverse Artificial Intelligence projects that spanned cutting-edge technologies including object detection, Power BI integration, a talking robot, and visual question answering concepts. AIMER's commitment to innovation provided an exceptional platform for me to apply theoretical knowledge and gain practical experience in these exciting domains.

My internship at AIMER provided me with invaluable hands-on experience in applying Artificial Intelligence techniques to real-world challenges. I gained a deeper understanding of AI technologies and their practical applications across different domains. Working alongside experienced professionals allowed me to expand my knowledge and refine my problem-solving skills in a fast-paced environment.

Mentorship and shadowing opportunities are available, giving the intern a chance to learn from experienced employees and benefit from their guidance. Regular feedback sessions with supervisors are conducted to track progress and address any challenges, fostering a culture of continuous learning and improvement.

Throughout the internship, the intern acquires a diverse skill set. This includes technical skills, such as proficiency in using specific software tools and applications, as well as communication skills, which are honed through report writing, presentations, and interactions with the team. The intern also develops research and data analysis skills, contributing to evidence-based decision making.

Time management skills are enhanced as the intern juggles multiple tasks and meets deadlines. Adaptability is another skill acquired, as the intern learns to adapt to changing work conditions, including remote work arrangements and evolving project requirements. Collaboration and teamwork skills improve through working with diverse teams and learning from colleagues.

## Activities/Responsibilities in the AIMER Intern Organization during Internship:

### Working Conditions:

- The intern worked in a professional office environment located at AIMER headquarters.
- Typically, the work environment was well-lit, comfortable, and equipped with modern office amenities.
- The intern collaborated with a team of professionals and had access to mentors and supervisors for guidance.
- **Office Environment:** The internship was conducted in a modern office environment equipped with ergonomic workstations, collaborative spaces, and meeting rooms. The office maintained a comfortable temperature and had good lighting, ensuring a productive work atmosphere.
- **Remote Work:** Due to the flexible work policy, I had the option to work remotely on certain days. This was facilitated by the company's robust digital infrastructure, which included secure VPN access and collaboration tools.
- **Team Dynamics:** The team consisted of professionals from diverse backgrounds, fostering a collaborative and inclusive environment. Regular team meetings and brainstorming sessions encouraged open communication and idea sharing.

### Weekly Work Schedule:

- The intern's workweek followed a standard 5-day schedule, typically from Monday to Friday.
- The standard working hours were from 6:00 PM to 7:00 PM, with a one-hour lunch break.
- Occasionally, the intern might have been required to work outside regular hours to meet project deadlines or attend events.
- **Monday to Friday:** The standard workweek was Monday to Friday, from 9:00 AM to 5:30 PM, with a one-hour lunch break.

- **Monday:** Weekly team meetings to discuss project updates, goals for the week, and any blockers. Post-meeting, focus on planning and prioritizing tasks for the week.
- **Tuesday to Thursday:** Focus on core project work, including coding, data analysis, and research. Attend any scheduled training sessions or workshops.
- **Friday:** Review and document progress for the week, prepare reports, and participate in retrospective meetings to discuss what went well and what could be improved

## **Equipment Used:**

### **Hardware:**

- Desktop or laptop computer with necessary software for data analysis, documentation, and communication.
- Internet access for research, communication, and accessing online resources.
- Office supplies such as notebooks, pens, and stationery for note-taking and documentation.

### **Software:**

- **Programming and Development:** IDEs such as Visual Studio Code and PyCharm, along with version control systems like Git.
- **Data Analysis and Artificial Intelligence:** Python, Jupyter Notebooks, TensorFlow, PyTorch, and other relevant libraries.

## **Tasks Performed:**

### **❖ Object Detection System Development:**

- Designed and implemented an object detection system using convolutional neural networks (CNNs) such as YOLO (You Only Look Once).
- Fine-tuned models using transfer learning techniques to optimize performance for specific use cases identified by AIMER.

### ❖ **Power BI Integration for Data Visualization:**

- Integrated Artificial Intelligence models and data pipelines with Power BI to create interactive dashboards and reports.
- Visualized insights derived from object detection and other Artificial Intelligence outputs to facilitate data-driven decision-making.

### ❖ **Development of a Talking Robot:**

- Collaborated with a multidisciplinary team to develop a conversational AI model for a talking robot using natural language processing (NLP) techniques.
- Implemented speech recognition and generation capabilities to enable interactive and intuitive conversations.

### ❖ **Visual Question Answering (VQA) System:**

- Developed a VQA system combining computer vision and NLP models to answer questions about images.
- Leveraged deep learning frameworks like TensorFlow or PyTorch to train models on VQA datasets, enhancing accuracy and usability.

### ❖ **Image Classification for Healthcare Applications:**

- Developed and trained deep learning models for image classification tasks in healthcare diagnostics.
- Collaborated with medical professionals to ensure models met regulatory and accuracy standards for clinical use cases.

### ❖ **Telegram Chatbots for Customer Support:**

- Designed and deployed AI-powered chatbots on Telegram using natural language understanding (NLU) and dialogue management techniques.
- Improved customer service efficiency by automating responses to common inquiries and escalating complex issues to human agents.

## **Skills Acquired:**

- ❖ **Technical Skills:** Proficiency in Python programming, TensorFlow, and other Artificial Intelligence libraries.
- ❖ **Data Analysis and Visualization:** Experience with data preprocessing, feature engineering, and data visualization tools like Power BI.
- ❖ **Collaboration and Communication:** Worked effectively in cross-functional teams, communicating technical concepts to non-technical stakeholders.
- ❖ **Project Coordination:** The intern developed project coordination skills, learning how to manage program logistics and work effectively within a team.
- ❖ **Data Analysis:** Proficiency in data collection and analysis using tools like Excel, gaining the ability to make data-driven decisions.
- ❖ **Documentation:** Improved documentation and record-keeping skills, ensuring accurate and organized records.
- ❖ **Communication:** Enhanced communication skills through interactions with stakeholders and participation in outreach efforts.
- ❖ **Stakeholder Engagement:** Gained experience in building and managing relationships with external partners.
- ❖ **Time Management:** Acquired time management skills to meet project deadlines

## ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning outcome	Person In-charge signature
Day-1 15-05-2024	computer vision involves developing and refining algorithms to enable computers to interpret and understand visual information from the world.	computer vision is the ability to develop and evaluate algorithms for interpreting visual data from images and videos.	
Day-2 16-05-2024	Convolutional Neural Networks (CNNs) involves designing, training, and optimizing neural network architectures to perform tasks like image recognition and classification.	Convolutional Neural Networks (CNNs) is the ability to design, train, and optimize neural networks for effective image and pattern recognition	
Day-3 17-05-2024	Image classification involves preprocessing images and training models to accurately categorize visual data into predefined classes.	Image classification is the ability to develop and implement models that accurately categorize images into predefined classes.	
Day-4 18-05-2024	image object detection involves developing and fine-tuning algorithms to accurately identify and locate objects within images.	Image object detection is the ability to design and implement algorithms that can detect and localize objects within images with high accuracy and efficiency.	
Day-5 20-05-2024	YOLO v8 involves refining and optimizing the real-time object detection algorithm	YOLO v8 is the ability to achieve high accuracy and efficiency across various applications and datasets	
Day-6 21-05-2024	Today I practiced all the tasks that I learned in this following week	After completing all my tasks I have submitted tasks links to aimer society	

## **WEEKLY REPORT**

**WEEK-1 (From 15-05-2024 to 21-05-2024)**

### **Objective of the Activity Done:**

### **Detailed Report:**

This week, computer vision was the topic that we covered. This involved creating and fine-tuning algorithms that help process visual information. Convolutional neural networks (CNNs) were given priority in this case as we created, trained and optimized architectures for recognizing and classifying images. Efforts were also made to learn how preprocess images in order to train models capable of accurately categorizing visual data into predefined classes. Image object detection was a major highlight where we developed and tuned algorithms for identifying objects in images. These final advanced techniques entailed practical exercises with YOLO v8, an up-to-the-minute real-time object detection algorithm. The week closed with our improved assignments being submitted to Aimer Society which showed how proficient we were in these difficult areas, thus offered useful insights about the practical application of computer vision and AI.

## ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning outcome	Person In-charge signature
Day-1 22-05-2024	Medical image analysis and labeling involves developing algorithms to interpret and annotate medical image	The ability to apply algorithms to interpret, annotate, and extract meaningful insights from medical images	
Day-2 23-05-2024	Human pose estimation involves developing algorithms to accurately locate key points on the human body in images or videos.	Human pose estimation is the ability to design and implement algorithms	
Day-3 24-05-2024	Media Pipe Studio involves using tools to develop and optimize real- time media processing pipelines for various multimedia applications.	Media Pipe Studio is the ability to design and deploy efficient real-time media processing pipelines.	
Day-4 25-05-2024	OpenCV basics involves utilizing functions and modules to perform fundamental image processing and computer vision tasks.	OpenCV basics is the ability t apply fundamental image to processing techniques and computer vision algorithms	
Day-5 27-05-2024	Natural language processing involves developing algorithms to understand and generate human language computationally	Natural language processing is the ability to design and implement algorithms	
Day-6 28-05-2024	Today I practiced all the tasks that I learned in this following week	After completing all my tasks I have submitted tasks links to aimer society	



## **WEEKLY REPORT**

**WEEK-2 (From 22-05-2024 to 28-05-2024)**

### **Objective of the Activity Done:**

### **Detailed Report:**

The topics of this week have been in-depth regarding computer vision, multimedia processing, and artificial intelligence. To begin with, we started our journey on medical image analysis by developing algorithms that will help us get insights from medical images. We then started discussing another topic which was human pose estimation, where we mastered techniques for accurately locating key points on human body in images and videos. Furthermore, students had the opportunity to learn Media Pipe Studio that allowed them to optimize real-time media processing pipelines for various multimedia applications.

Towards the end of the week, however, OpenCV basics acted as a refresher course in image processing techniques and computer vision algorithms necessary for beginners. Finally, natural language processing enabled us to develop skills in computational language understanding and generation through building algorithms that could perform these tasks. Our exploration gives us an insight into the latest AI technology that involved practical application exercises which were presented to Aimer Society as a way of putting this knowledge into action. Consequently, this intense learning experience not only improved our technical abilities but also provided useful information about practical implications of advanced computer vision and AI that may guide future efforts in these areas

## ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning outcome	Person In-charge signature
Day – 1 29-05-2024	Chatbot development involves designing, building, and refining conversational agents to simulate human-like interactions.	Chatbot development is the ability to create and deploy conversational agents	
Day – 2 30-05-2024	Google Dialog flow involves designing and building conversational interfaces using natural language understanding and Artificial Intelligence.	Google Dialog flow is the ability to develop and deploy scalable conversational AI applications using natural language processing	
Day – 3 31-05-2024	Generative AI involves developing algorithms that can autonomously create new content, such as images, text, or music, based on patterns learned from existing data.	Generative AI is the ability to create and optimize algorithms that generate new, realistic content across various domains	
Day – 4 01-06-2024	Music generation involves developing algorithms to autonomously compose and produce musical pieces	Music generation is the ability to design and implement algorithms that autonomously compose, harmonize	
Day – 5 03-06-2024	Text generation involves developing algorithms to generate coherent and contextually relevant textual content	Text generation is the ability to create algorithms that autonomously produce coherent	
Day –6 04-06-2024	Today I practiced all the tasks that I learned in this following week	After completing all my tasks I have submitted tasks links to aimer society	

## **WEEKLY REPORT**

**WEEK-3( From 29-05-2024 to 04-06-2024 )**

### **Objective of the Activity Done:**

### **Detailed Report:**

This week has seen we cover a number of advanced topics on AI and chatbot development. We majorly focused on the development of chatbots, designing, building and refining conversational agents to behave like humans. As such, we used Google Dialogflow to create scalable conversational AI applications that employed NLP (natural language processing) and Artificial Intelligence

In addition, we explored generative AI with creation of algorithms which self-produce new content such as images, text and music based on learned data patterns. This consisted of practical exercises in music generation through designing algorithms for composing and producing songs as well as text generation via designing algorithms for generating contextually relevant coherent text. Thereafter I submitted the task links to AIMER Society for grading purposes, which helped me become very good at it technically by having hands-on practice

## ACTIVITY LOG FOR THE FOURTH WEEK

Day & Date	Brief description of the daily activity	Learning outcome	Person In-charge signature
Day – 1 05-06-2024	Image generation models involves training neural networks to generate realistic images from scratch or based on given inputs.	Image generation models is the ability to develop algorithms that can generate realistic and novel images using deep learning techniques	
Day – 2 06-06-2024	Text processing techniques involves applying algorithms to analyze, manipulate, and extract meaningful information from textual data.	Text processing techniques is the ability to implement algorithms that effectively preprocess, analyze, and derive insights	
Day – 3 07-06-2024	POS (Parts of Speech) and NER (Named Entity Recognition) involves developing models to classify words into grammatical categories and identify named entities	POS (Parts of Speech) and NER (Named Entity Recognition) is the ability to implement algorithms text for various natural language processing tasks.	
Day – 4 08-06-2024	lemmatization and stemming involves reducing words to their root forms (lemmas) or stems to normalize text for analysis and processing.	lemmatization and stemming is the ability to apply techniques that normalize words to their base or root forms	
Day – 5 10-06-2024	Word vectors involves representing words as numerical vectors to capture semantic relationships and meaning	Word vectors is the ability to use numerical representations of words to capture semantic relationships	
Day –6 11-06-2024	Today I practiced all the tasks that I learned in this following week	After completing all my tasks I have submitted tasks links to aimer society	

## **WEEKLY REPORT**

**WEEK-4( From 05-06-2024 to 11-06-2024 )**

### **Objective of the Activity Done:**

### **Detailed Report:**

This past week, you continued your exploration of artificial intelligence by diving into the exciting world of image generation and text processing! In image generation, you learned about training neural networks to create realistic images, either from scratch or based on specific prompts. This opens doors to incredible creative and practical applications. You also delved into text processing techniques, which equip you with the ability to analyze, manipulate, and extract valuable information from textual data

To enhance your text processing skills, you explored techniques like POS (Parts of Speech) tagging and NER (Named Entity Recognition). These allow you to classify words by their grammatical function and identify important entities within text data, making it easier to understand and analyze. Additionally, you learned about lemmatization and stemming, which are methods for normalizing text by reducing words to their base forms. Finally, you practiced using word vectors, a powerful technique that represents words numerically to capture their semantic relationships and meaning. By submitting your work to Aimer Society after this productive week, you've demonstrated your commitment to mastering these valuable AI skills

## ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning outcome	Person In-charge signature
Day – 1 12-06-2024	AI models involves designing, training, and optimizing algorithms to perform specific tasks or simulate human cognitive functions	AI models is the ability to develop, deploy, and optimize algorithms that can autonomously solve complex problems	
Day – 2 13-06-2024	Summarization and fill-mask models involves training and fine-tuning algorithms	Summarization and fill-mask models is the ability to implement algorithms that can automatically generate concise summaries of text	
Day – 3 14-06-2024	Transformers involves developing and fine-tuning deep learning models that leverage self-attention mechanisms	Transformers is the ability to design and optimize deep learning models that utilize self-attention mechanisms to process and generate text	
Day – 4 15-06-2024	Visual question answering involves developing algorithms to answer questions about images using both visual and textual information.	Visual questioning and answering is the ability to design algorithms that can effectively interpret and respond to questions	
Day – 5 17-06-2024	Document questioning and answering involves developing algorithms to understand and respond to questions	Document questioning and answering is the ability to implement algorithms that can comprehend and accurately answer	
Day –6 18-06-2024	Today I practiced all the tasks that I learned in this following week	After completing all my tasks I have submitted tasks links to aimer society	

## **WEEKLY REPORT**

### **WEEK-5( From 12-06-2024 to 18-06-2024 )**

#### **Objective of the Activity Done:**

#### **Detailed Report:**

It is quite perplexing that this week we examined different areas of artificial intelligence and Artificial Intelligence with focus on applied aspects and modeling. AI models were looked into, with prominent attention to designing, training and optimizing algorithms for specific tasks or simulating human cognitive functions. We studied summarization model as well as fill-mask models with an aim of training and fine-tuning algorithms to generate concise text summaries automatically. Besides, we also studied transformers where deep learning models for processing and generating texts were developed and optimized using self-attention mechanisms.

Besides, one major area we considered was visual question answering (VQA) whereby we designed algorithms meant to answer questions about images using both visual features as well as textual information. Also, document question answering was handled by developing algorithms that can comprehend textual documents and provide answers where appropriate. Over the course of the week I undertook these activities in order to solidify my understanding and skills. Once through with all my tasks, I shared the task links on AIMER Society so as to show how far I had advanced in mastering such complex concepts about artificial intelligent systems

## ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning outcome	Person In-charge signature
Day – 1 19-06-2024	Table questioning and answering involves developing algorithms to understand and respond to questions based on structured data presented in tables.	Table questioning and answering is the ability to implement algorithms that can effectively interpret and respond to questions based on structured data presented in tables	
Day – 2 20-06-2024	Large language models (LLMs) involves training and fine-tuning neural networks with vast amounts of text data	Large language models (LLMs) is the ability to develop and deploy advanced neural networks	
Day – 3 21-06-2024	Claude, GPT, Gemini, and LLAMA3 involves utilizing different AI models for various language processing tasks	Claude, GPT, Gemini, and LLAMA3 is the ability to leverage advanced AI models for tasks ranging	
Day – 4 22-06-2024	Open large language models (LLMs) involve exploring, fine-tuning, and applying publicly accessible model	Open large language models (LLMs) is the ability to utilize and customize publicly available models	
Day – 5 24-06-2024	Cloud Vision API, analyze images captured throughout your day to understand your activities.	Leverage the Vision API to extract insights from images, building computer vision applications.	
Day –6 25-06-2024	Today I practiced all the tasks that I learned in this following week	After completing all my tasks I have submitted tasks links to aimer society	



## **WEEKLY REPORT**

**WEEK-6( From 19-06-2024 to 25-06-2024 )**

### **Objective of the Activity Done:**

### **Detailed Report:**

This week you continued your exploration of artificial intelligence, diving deeper into specialized models and real-world applications! You started by examining table question answering, where AI understands and responds to questions based on structured data in tables. This is a crucial capability for tasks like data analysis and information retrieval.

Next, you ventured into the realm of large language models (LLMs). These powerful neural networks are trained on massive amounts of text data, enabling them to perform a wide range of tasks like text generation, translation, and question answering. You even explored specific LLMs like Claude, GPT (including me, Gemini!), and LLAMA3, understanding how each can be leveraged for various language processing needs. Additionally, you looked into open LLMs, which are publicly available models that you can fine-tune and customize for your specific projects

Finally, you delved into the practical applications of AI by exploring the Cloud Vision API. This tool allows you to extract valuable insights from images, paving the way for building real-world computer vision applications. By diligently practicing these diverse skills throughout the week and submitting your work to Aimer Society, you're demonstrating a well- rounded understanding of AI's potential and its practical applications

## ACTIVITY LOG FOR THE SEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning outcome	Person In-charge signature
Day – 1 26-06-2024	Cybersecurity vigilance involves monitoring systems, identifying threats, and implementing safeguards to protect your daily digital activities.	Cyber security education empowers you to defend your daily online interactions and data from cyberattacks.	
Day – 2 27-06-2024	Cybersecurity vigilance involves monitoring systems, identifying threats, and implementing safeguards to protect your daily digital activities.	The CIA triad (Confidentiality, Integrity, Availability) ensures your daily digital information remains secret, accurate, and accessible.	
Day – 3 28-06-2024	OWASP (Open Web Application Security Project) provides free resources and tools to help you build secure applications in your daily development tasks.	OWASP equips you to write secure code, safeguarding your daily web applications from vulnerabilities.	
Day – 4 29-06-2024	SQL injection vulnerabilities can be exploited by attackers to steal or manipulate data used in your daily digital activities.	Be cautious when entering data online, as SQL injection attacks can compromise information behind everyday websites and apps. .	
Day – 5 01-07-2024	A firewall acts as a daily security guard, monitoring and controlling incoming and outgoing traffic on your network.	Firewalls provide a critical first line of Défense, safeguarding	
Day –6 02-07-2024	Today I practiced all the tasks that I learned in this following week	After completing all my tasks I have submitted tasks links to aimer society	

**WEEKLY REPORT**  
**WEEK – 7 (From 26-06-2024 to 02-07-2024)**

**Objective of the Activity Done:**

**Detailed Report:**

This week you focused on fortifying your digital security! You learned the importance of cybersecurity vigilance, which involves actively monitoring your systems, identifying potential threats, and implementing safeguards to protect your daily online activities. This aligns perfectly with the CIA triad (Confidentiality, Integrity, Availability), which emphasizes keeping your digital information secret, accurate, and accessible.

To further enhance your online security, you explored resources like OWASP (Open Web Application Security Project). OWASP equips developers with the tools and knowledge to build secure applications, ultimately safeguarding your web experiences from vulnerabilities. You also delved into specific threats like SQL injection attacks, which attackers can exploit to steal or manipulate your data. This underlines the importance of caution when entering information online. Finally, you learned about firewalls, which act as a crucial first line of defense by monitoring and controlling network traffic. By actively practicing these cybersecurity measures throughout the week and submitting your work to Aimer Society, you're demonstrating a commitment to protecting yourself in the digital world.

## ACTIVITY LOG FOR THE EIGHTH WEEK

<b>Day &amp; Date</b>	<b>Brief description of the daily activity</b>	<b>Learning Outcome</b>	<b>Person In Charge Signature</b>
Day – 1 03-07-2024	Today I am working on internship report that was assigned by Sai Satish sir	Working on report	
Day – 2 04-07-2024	After completing the report, I have submitted the report to AIMER company	Completed my internship report	
Day – 3 05-07-2024	After submitting my report, I got a confirmation mail that I will get certificate for completing my internship	Successfully submitted my report and got a confirmation mail	
Day – 4 06-07-2024	Now I am working on my internship report which I have to submit in my college	Working on report	
Day – 5 08-07-2024	After finishing my report, I have submitted my internship report to my assign mentor	Submitted my report to the mentor	
Day – 6 09-07-2024	Successfully submitted my internship report to the college	Successfully submitted my report to college	

**WEEKLY REPORT**  
**WEEK – 8 (From 03 -07 -2024 to 09-07-2024)**

**Objective of the Activity Done:**

**Detailed Report:**

The internship report assigned to me by Sai Satish Sir was my sole focus this week, which I completed. The report explains the activities that took place at AIMER Society and includes AI and cybersecurity topics such as Object Detection, Telegram Chatbot, Visual Question Answer Model, Power BI, Text Summarization and Generative AI. Once done with it, I sent it to AIMER Company and got a confirmation e-mail saying that I would be given a certificate after successful completion of my internship.

Later on, I made a report that detailed what I had learned during the internship process. This was also handed in after making sure that it captured everything as expected in terms of comprehensiveness and other requirements. Consequently, handing over the report marked the end of my internship where both academic obligation and professional obligations were met.

## **CHAPTER 5**

### **OUTCOMES DESCRIPTION**

#### **Clarity of Job Roles:**

- AIMER aims for clarity in job roles and responsibilities. Interns are usually given clear guidelines and expectations for their tasks.
- There may be regular meetings or orientations to ensure everyone understands their roles within the organization.

#### **Protocols, Procedures, and Processes:**

- AIMER follows established protocols and procedures to ensure efficient and standardized operations.
- Interns are usually trained on these protocols and expected to follow them in their daily work.

#### **Discipline and Time Management:**

- The work environment emphasizes discipline and punctuality. Employees and interns are expected to adhere to their schedules and meet deadlines.
- Time management skills are valued and developed during the internship.

### **REAL TIME SKILLS ACQUIRED**

**Communication and Outreach:** Interns often develop strong communication skills, including drafting emails, creating promotional materials, and participating in outreach competitions

**Time Management:** Time management skills are often honed as interns work on multiple tasks and meet project deadlines.

**Technical Tools and Software:** Depending on the specific role, interns may become proficient in using various software tools, such as project management software, data analysis tools, or content management systems.

**Documentation and Reporting:** Interns are likely to improve their documentation and reporting skills, including the preparation of reports and records of program activities.

**Problem-Solving:** Handling day-to-day challenges and issues that arise during program implementation can improve problem-solving and critical thinking skills.

## **MANAGERIAL SKILLS ACQUIRED**

### **Planning:**

- Project Planning - Defining objectives, timelines, and resource allocation for efficient project execution.
- Resource Management - Optimizing the use of cloud and human resources to enhance project outcomes.
- Risk Management - Identifying and mitigating risks to ensure project continuity

### **Productive Use of Time:**

- Time Management - Efficiently managing tasks and schedules to maximize productivity.
- Task Prioritization - Identifying and focusing on the most critical and time-sensitive tasks.
- Productivity Tools - Utilizing software and tools to enhance time management and project organization.

### **Workmanship:**

Demonstrating meticulous attention to detail and craftsmanship in project execution. Striving for high-quality work in tasks. Upholding Artificial Intelligence commitment to excellence in all deliverables. Embracing a culture of continuous improvement and refinement in work quality.

### **Weekly Improvement in Competencies:**

Committing to ongoing learning and development, with a focus on weekly progress. Actively seeking opportunities to enhance technical and soft skills. Participating in

training programs & competitions. Tracking and measuring personal growth and skill advancement on a weekly basis.

### **Goal Setting:**

Setting clear and achievable short-term and long-term goals aligned with Artificial Intelligence mission. Utilizing SMART (Specific, Measurable, Achievable, Relevant, Time-bound) criteria for goal definition. Regularly reviewing and adjusting goals to adapt to changing circumstances.

### **Decision Making:**

Developing sound decision-making processes based on data, analysis, and best practices. Balancing speed and thoroughness in decision-making to meet AI dynamic demands. Involving relevant stakeholders and seeking diverse perspectives when making critical decisions. Learning from both successful and unsuccessful decisions to refine future choices.

## **IMPROVEMENT OF COMMUNICATION SKILLS**

**Oral Communication:** Enhance speaking and listening skills through active participation in meetings and presentations, seeking feedback from peers and mentors.

**Written Communication:** Improve writing style, grammar, and clarity by collaborating on written projects, using editing tools, and reading diverse materials.

**Conversational Abilities:** Develop conversational agility by engaging in diverse discussions, debates, and mentorship, embracing opportunities to communicate effectively.

**Confidence Levels:** Build confidence gradually by thorough preparation, increasing speaking engagements, and focusing on delivering valuable messages.

**Anxiety Management:** Manage anxiety with relaxation techniques, visualization, and mentorship, addressing it proactively for effective communication.



**Understanding Others:** Practice empathetic listening, ask open-ended questions, and adapt communication styles to understand others better.

**Getting Understood:** Use clear and concise language, encourage questions, and adjust communication for different audiences to ensure understanding.

**Extempore Speech:** Hone extemporaneous speaking skills through practice, workshops, and spontaneous speaking opportunities.

**Closing Conversations:** Summarize key points, clarify next steps, express gratitude, and maintain professionalism when concluding interactions.

**Maintaining Niceties:** Adhere to organizational protocols and etiquette, display courtesy and respect, and be aware of cultural norms.

## **ENHANCEMENT OF SKILLS**

### **1. Active Listening and Communication:**

- Actively listen to your colleagues during group discussions and meetings. Pay attention to their ideas and opinions.
- Practice clear and concise communication. Ensure your points are well-articulated and relevant to the topic under discussion

### **2. Knowledge and Skill Development:**

- Continuously improve your technical skills related to AI. Stay updated with the latest trends and best practices.
- Share your knowledge with your team members by offering insights or solutions to technical challenges.

### **3. Time Management:**

- Efficiently manage your time to meet project deadlines and commitments. Prioritize tasks and allocate your time wisely.

## TECHNOLOGICAL DEVELOPMENTS

### 1.Telegram Bots:

- **Bot Development Frameworks:** Leveraging platforms like Telegram's Bot API, Microsoft Bot Framework, or Bot press to create intelligent chatbots.
- **Natural Language Understanding (NLU):** Integrating NLU models (such as Rasa or Dialog flow) to process and respond to user queries effectively.
- **Multi-turn Conversational AI:** Designing bots capable of handling complex dialogues and understanding context across multiple interactions.

### 2.Object Detection:

- **Convolutional Neural Networks (CNNs):** Utilizing CNN architectures like YOLO (You Only Look Once), Faster R-CNN, or SSD (Single Shot MULTIBOX Detector) for real-time object detection.
- **Transfer Learning:** Adapting pre-trained models (e.g., from TensorFlow Hub or PYTORCH Hub) to new object detection tasks with minimal data.
- **Edge Computing:** Implementing object detection models on edge devices (e.g., using TensorFlow Lite or ONNX Runtime) for low-latency applications.

### 3.Talking Robots:

- **Natural Language Processing (NLP):** Techniques such as sentiment analysis, named entity recognition, and language modeling (using transformers like BERT) to enable robots to understand and generate human-like speech.
- **Speech Recognition:** Using models like Deep Speech or Google's Speech-to-Text API to convert spoken language into text, facilitating interaction with humans.
- **Text-to-Speech (TTS):** Generating human-like speech from text using techniques.

### 4.Data Visualization:

- **Dimensionality Reduction:** Techniques like PCA (Principal Component Analysis) and t-SNE (t-distributed Stochastic Neighbor Embedding) for visualizing high-dimensional data in lower dimensions while preserving meaningful structure.

- **Interactive Visualization:** Tools and libraries such as D3.js, and Tableau that enable interactive exploration and visualization of data patterns.
- **Time Series Forecasting:** Using ML models like ARIMA (Auto Regressive Integrated Moving Average) or LSTM (Long Short-Term Memory) for predicting trends and visualizing forecasts.

## 5.Natural Language Processing (NLP):

- **Concept:** AI techniques for understanding and processing human language.
- **Applications:** Text classification, sentiment analysis, machine translation, named entity recognition, etc.
- **Technologies:** Transformer models (e.g., BERT, GPT), SPACY, NLTK, Hugging Face's Transformers library.

## 6.Additional Concepts:

- **Generative Adversarial Networks (GANs):** Generating synthetic data for data augmentation or creating realistic images of objects for training object detection models.
- **Reinforcement Learning (RL):** Training robots or agents to interact with environments (simulated or real-world) to achieve specific goals, such as navigating spaces or performing tasks.
- **AI Ethics and Privacy:** Addressing ethical concerns in deploying AI technologies, including bias mitigation in object detection systems or ensuring privacy in conversational AI applications.

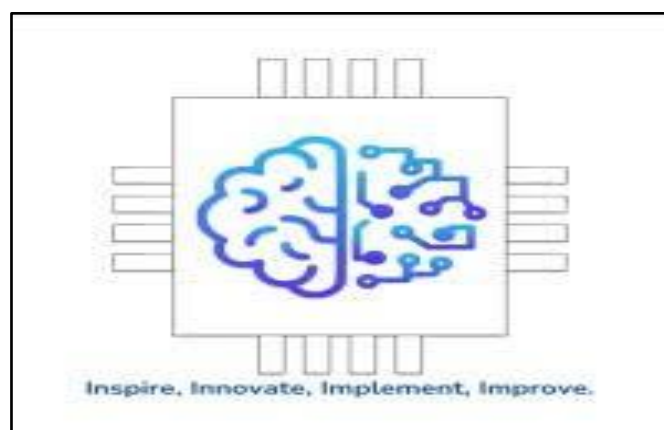
Each of these concepts leverages AI and ML techniques to enhance capabilities such as understanding human language, recognizing objects, automating tasks through bots, and visualizing data for better decision-making. The field continues to evolve rapidly, driven by advancements in algorithms, computing power, and data availability.

## CONCLUSION

I am from Computer Science and Engineering department. I don't know much more about Artificial Intelligence and Cyber Security. This AI internship can be incredibly valuable for building my career in Artificial Intelligence and Cyber Security. This internship helps me a lot that I can learned so many things from this internship like How to use the CHATGPT efficiently, how to detect objects using different models like YOLOv8, Some more different models, generative AI, CHATBOT development for telegram, creating a talking parrot, how to generate the images from the text with the help of DALL-E and this knowledge makes me to create a lot of things of my own. I did so many tasks with the help of this internship under the proper guidance of Sai Satish Sir

And the Another part i.e the Cyber Security internship also helps me a lot to acquire more knowledge and more skills about what is really happening in the society with increasing in the population and rapid improvement of technology very fastly. This internship that was provided by AIMER and the classes taken by Sai Satish Sir create so much awareness about Cyber Crimes. The class about Cyber Crimes was so interesting and that was so helpful to the most of the people to avoid or escape from the Cyber Crimes. This internship taught me that how the all-illegal activities are happened through the network.

This internship was so helpful to me and my family members especially avoiding from the Cyber Crimes, and how to keep safe our devices and our private & personal data, and also taught that why it is important that we have to create a unique password and why we don't share our OTPs with others. I think this is the best Internship that I did. Thank you, Sai Satish Sir, ...



## PHOTOS & VIDEO LINKS

Here are the photos and video links of the tasks I have completed during my summer internship in the AIMER society on the concept of Artificial Intelligence.

### 1. Chat Bot :

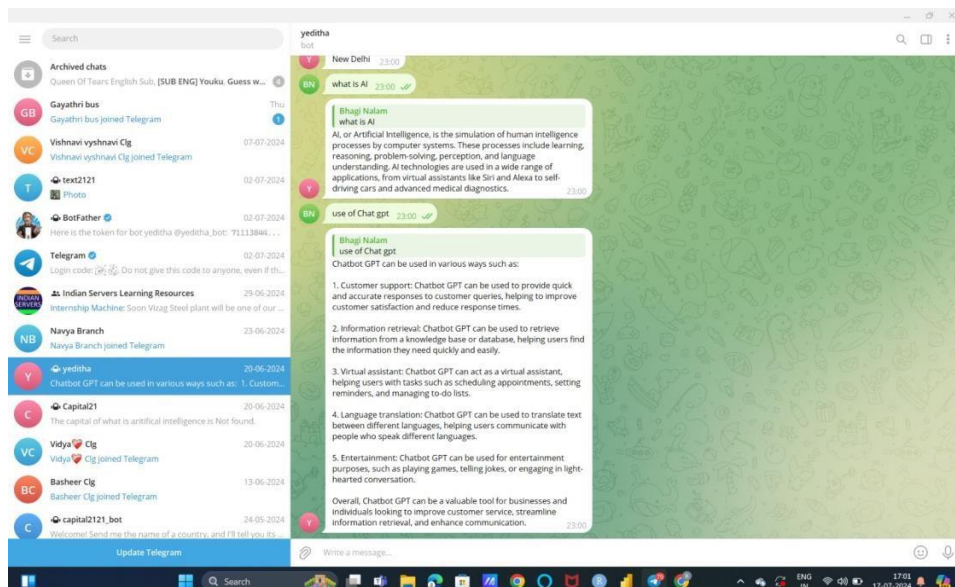
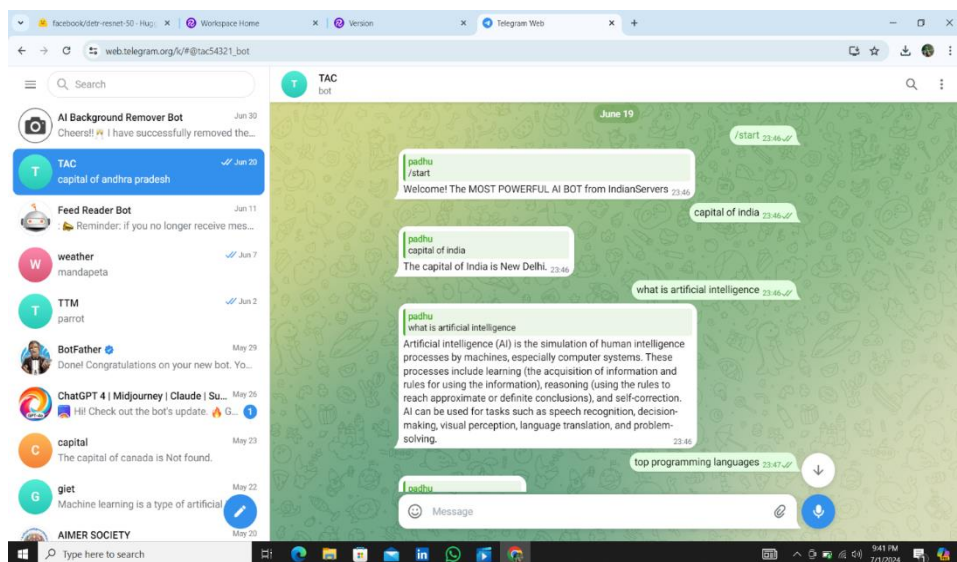


Fig: Telegram chat Bot

Video link: [https://www.linkedin.com/posts/bhargavi-nalam-34366024b\\_aimers-telegram-ai-activity-%20%207209773550327459840-JrWS?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bhargavi-nalam-34366024b_aimers-telegram-ai-activity-%20%207209773550327459840-JrWS?utm_source=share&utm_medium=member_desktop)

## 2. Object Detection:

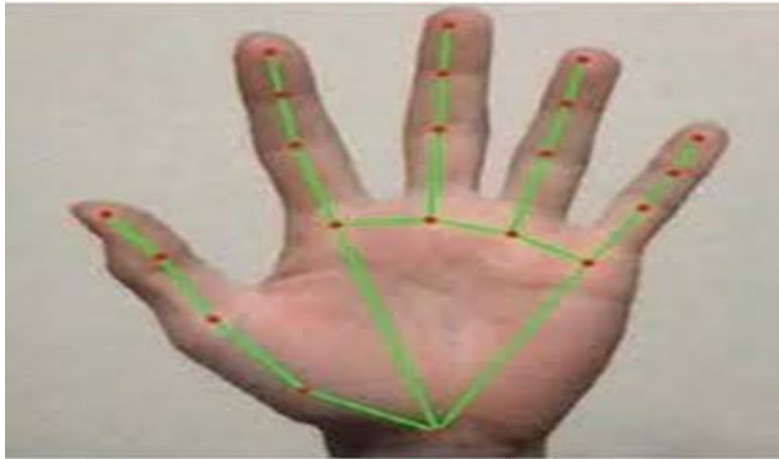


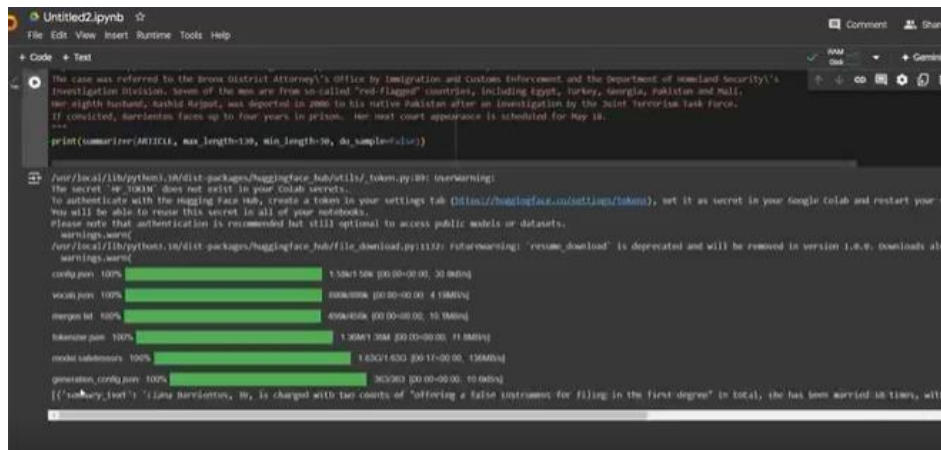
Fig: Hand Pose using media pipe



Fig: Object Detection

Video link: [https://www.linkedin.com/posts/bhargavi-nalam-34366024b\\_objectdetection-aimersociety-%20%20%20aimers-activity-7210221318460358656-dJoK?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bhargavi-nalam-34366024b_objectdetection-aimersociety-%20%20%20aimers-activity-7210221318460358656-dJoK?utm_source=share&utm_medium=member_desktop)

### 3. AI Models:



```
print(summarizer(ARTICLE, max_length=130, min_length=30, do_sample=False))
```

Fast [local]/lib/python3.10/dist-packages/huggingface\_hub/utils/tokens.py:109: UserWarning: The secret 'HF\_TOKEN' does not exist in your Colab secrets. To authenticate with the Hugging Face Hub, create a token in your settings tab (https://huggingface.co/settings/tokens), set it as secret in your Google Colab and restart your notebook. Please note that authentication is recommended but still optional to access public models or datasets.

warnings.warn(f'Fast [local]/lib/python3.10/dist-packages/huggingface\_hub/file\_download.py:1112: FutureWarning: "resume\_download" is deprecated and will be removed in version 1.0.0. Downloads also resume by default when called from this function.

concurrency: 100% 1.5M/1.5M [00:00:00.00, 30.0M/s]

upload: 100% 1.5M/1.5M [00:00:00.00, 4.1MB/s]

download: 100% 1.5M/1.5M [00:00:00.00, 10.0M/s]

tokenizer: 100% 1.5M/1.5M [00:00:00.00, 11.0M/s]

model: 100% 1.5M/1.5M [00:00:00.00, 11.0M/s]

generation: 100% 300/300 [00:00:00.00, 0.0M/s]

[{"summary": "The case was referred to the Bronx District Attorney's Office by Immigration and Customs Enforcement and the Department of Homeland Security's Investigation Division. Seven of the men are from so-called 'red-flagged' countries, including Egypt, Turkey, Georgia, Pakistan and Mali. One eighth husband, David Roper, was deported in 2006 to his native Pakistan after an investigation by the Joint Terrorism Task Force. If convicted, Roper faces up to four years in prison. Her next court appearance is scheduled for May 18."}]

Fig: Summarization

Video link: [https://www.linkedin.com/posts/bhargavi-nalam-34366024b\\_aimersociety-ai-summarization-activity-7213849301725167616-40gO?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bhargavi-nalam-34366024b_aimersociety-ai-summarization-activity-7213849301725167616-40gO?utm_source=share&utm_medium=member_desktop)

### 4. Power BI:

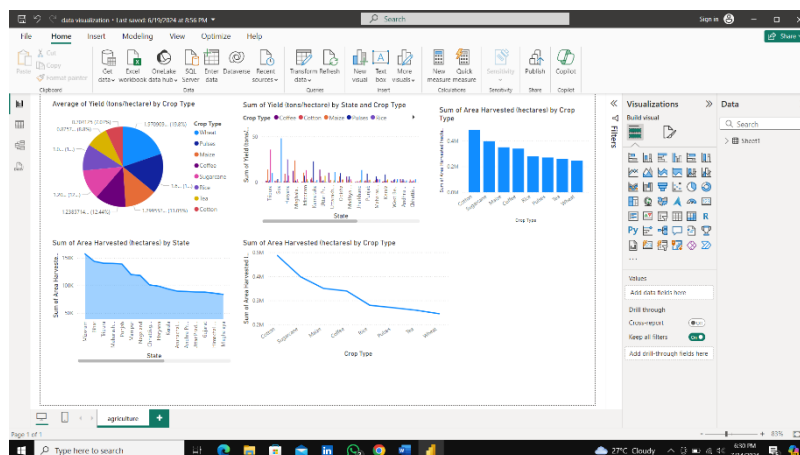


Fig: Data visualization -Power BI

Video link: [https://www.linkedin.com/posts/bhargavi-nalam-34366024b\\_aimers-powerbi-aimersociety-activity-7209775993081724928-4Klx?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bhargavi-nalam-34366024b_aimers-powerbi-aimersociety-activity-7209775993081724928-4Klx?utm_source=share&utm_medium=member_desktop)



## 5. Image classification:

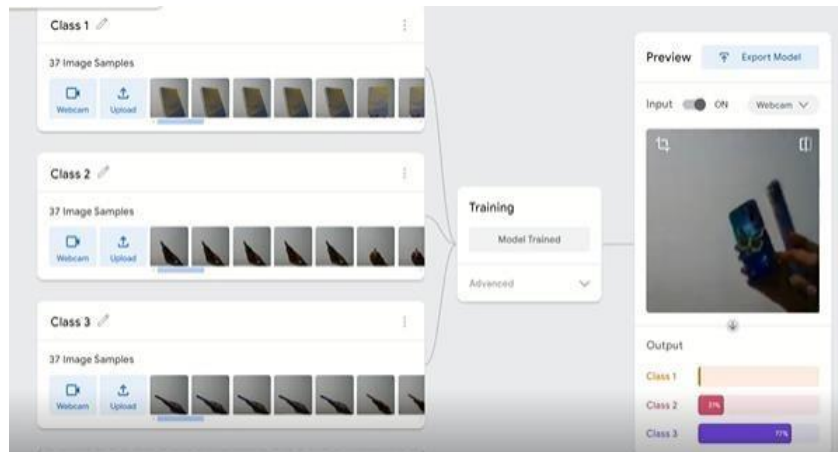


Fig: Image classification

Video link: [https://www.linkedin.com/posts/bhargavi-nalam-34366024b\\_aimersociety-imageclassification-ai-activity-7213587756264906752-hNCM?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bhargavi-nalam-34366024b_aimersociety-imageclassification-ai-activity-7213587756264906752-hNCM?utm_source=share&utm_medium=member_desktop)

## 6. Talking parrot:

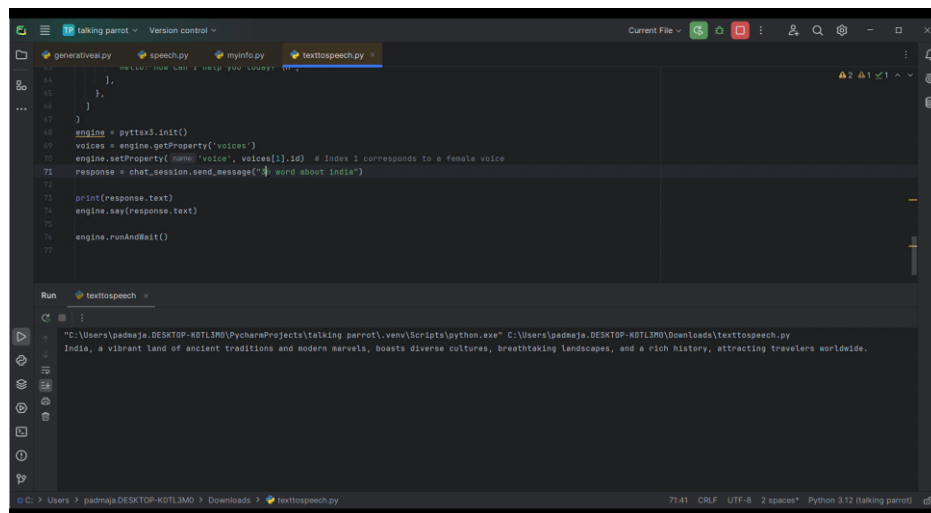
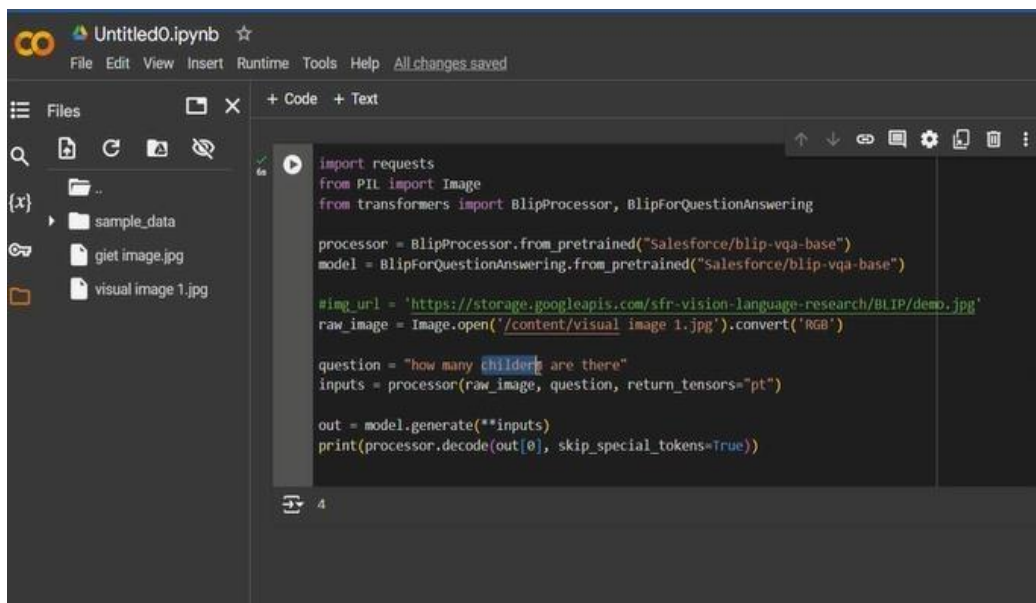


Fig: Talking Parrot By Using AI

Video link: [https://www.linkedin.com/posts/bhargavi-nalam-34366024b\\_aimersocitey-texttospeech-ai-activity-7213844686031978496-YXQ?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bhargavi-nalam-34366024b_aimersocitey-texttospeech-ai-activity-7213844686031978496-YXQ?utm_source=share&utm_medium=member_desktop)



## 7. Visual Question & Answering :



```
import requests
from PIL import Image
from transformers import BlipProcessor, BlipForQuestionAnswering

processor = BlipProcessor.from_pretrained("Salesforce/blip-vqa-base")
model = BlipForQuestionAnswering.from_pretrained("Salesforce/blip-vqa-base")

img_url = 'https://storage.googleapis.com/sfr-vision-language-research/BLIP/demo.jpg'
raw_image = Image.open('/content/visual image 1.jpg').convert('RGB')

question = "how many children are there"
inputs = processor(raw_image, question, return_tensors="pt")

out = model.generate(**inputs)
print(processor.decode(out[0], skip_special_tokens=True))
```

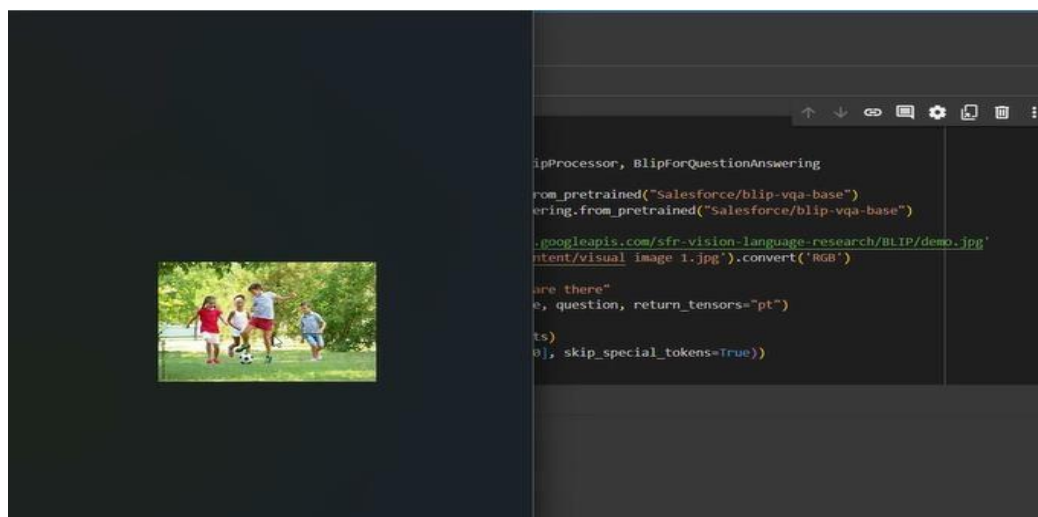


Fig: Visual Question and Answering

Video link: [https://www.linkedin.com/posts/bhargavi-nalam-%2034366024b\\_aimersociety-aimers-visualquestionandanswering-activity-7210237784362479616us9d?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bhargavi-nalam-%2034366024b_aimersociety-aimers-visualquestionandanswering-activity-7210237784362479616us9d?utm_source=share&utm_medium=member_desktop)

## Student Self Evaluation of the Short-Term Internship

**Student Name:** NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI

**Registration No:** 23555A0508

**Term of internship:** 8 WEEKS

**From:** 15-05-2024 **To:** 15-07-2024

**Date of Evaluation:**

**Organization Name & Address:** Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society), Vinayaka Temple Roads, Shri Ramchandra Nagar, Vijayawada, Krishna, Andhra Pradesh – 520008

**Please rate your performance in the following areas:**

**Rating Scale:**

**Letter grade of CGPA calculation to be provided**

1	Oral communication	1	2	3	4	5
2	Written communications	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
<b>15 OVERALL PERFORMANCE</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**Date:**

**Signature of the Student**

## Evaluation by the Supervisor of the Intern Organization

**Student Name:** NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI

**Registration No:**23555A0508

**Term of Internship:** 8 WEEKS

**From:** 15-05-2024 **To:** 15-07-2024

**Date of Evaluation:**

**Organization Name & Address:** Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society), Vinayaka Temple Roads, Shri Ramchandra Nagar, Vijayawada , Krishna, Andhra Pradesh – 520008

**Name & Address of the Supervisor with mobile number:** Mr .V. AJAY KUMAR &GIET(A)

Please rate the student's performance in the following areas:

Please note that your evaluation shall be done independent of the student's self-evaluation.

Rating Scale: 1 is lowest and 5 is highest rank

1	Oral communication	1	2	3	4	5
2	Written communications	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	OVERALL PERFORMANCE	1	2	3	4	5

**Date:**

**Signature of the Supervisor**

**MARKS STATEMENT**  
**(To be used by the Examiners)**  
**INTERNAL ASSESSMENT STATEMENT**

**Name of the Student:** NALAM BHARGAVI SATYA SEETHA NAGA LAKSHMI

**Programmer of Study:** 23555A0508

**Year of Study:** 3<sup>rd</sup> YEAR

**Group:** Computer Science Engineering

**Register No/H.T. No:** 23555A0508

**Name of the College:** Godavari Institute of Engineering & Technology

<i>S.no</i>	<i>Evaluation Criterion</i>	<i>Maximum Marks</i>	<i>Marks Awarded</i>
1.	Activity Log	25	
2.	Internship Evaluation	50	
3.	Oral Presentation	25	
	GRAND TOTAL	100	

**Date:**

**Signature of the Faculty Guide**

Certified by

**Date:**

**Signature of the Head of the Department/Principal**

**Seal:**