SHORT-TERM INTERNSHIP

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A)
2024-25

Program Book for

Short-Term Internship

(Virtual)

Name of the student: Bokka Kavya Sri

Name of the College: Godavari Institute of Engineering and Technology

Registration Number: 23555A0502

Period of Internship: From: 15-05-2024 To: 08-07-2024

Name & Address ofthe Intern Organization: Artificial Intelligence Medical and Engineering Researchers Society (AIMERS).

- **Website:** AIMER Society Website http://www.aimersociety.com

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An Internship Report on

(ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)

Submitted in accordance with the requirement for the degree of

BACHELOR OF TECHNOLOGY

Under the Faculty Guideship of

Mrs. R. Kusuma Kumari, Assistant Professor

Department of

COMPUTER SCIENCE & ENGINEERING

Submitted by

Bokka Kavya Sri

Reg.No: 23555A0502

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, KAKINADA.

Student's Declaration

I, **Bokka Kavya Sri** a student of **3rd B. Tech 1st semester** program of **VIRTUAL INTERNSHIP**, Reg. No.**23555A0502** of the Department of **COMPUTER SCIENCE AND ENGINEERING** college **GODAVARI INSTITUTE OFENGINEERING AND TECHNOLOGY** do hereby declared that I have complete the mandatoryinternship from **15-05-2024** to **15-07-2024** in **AIMERSOCIETY** (**ARTIFICIAL INTELLIGENCE MEDICAL AND ENGINEERING RESEARCHERS SOCIETY**) under the faculty Guideship of **MRS. R. Kusuma Kumari Assistant Professor** , Department of **COMPUTER SCIENCE AND ENGINEERING , GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY (A).**

(Signature and Date)

Official Certification

This is to certify that **Bokka Kavya Sri** Reg. No. **23555A0502** has completed his/her Internship in **AIMERS (ARTIFICIAL INTELLIGENCE MEDICAL AND ENGINEERING RESEARCHERS SOCIETY)** on ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING under my supervision as a part of partial fulfillment of the requirement for the Degree of **3rd B. Tech 1st semester** in the Department of **COMPUTER SCIENCE AND ENGINEERING, GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY (A).**

This is accepted for evaluation.

(Signatory with Date and Seal)

Endorsements

Faculty Guide

Head of the Department

Principal

Certificate from Intern Organization

AIMER Society

ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION

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

CERTIFICATE OF COMPLETION

This is to certify that Ms. Bokka Kavyasri (Reg. No. 23555A0502) 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-241051

This Certificate can be verified at www.AimerSociety.com

Sai Satish

D. Sai Satish
President, AIMER Society

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 Head of the Department **Dr. B. SUJATHA**, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, **GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A)**, **RAJAHMUNDRY** 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.

We 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.

We are grateful to our guide **MRS. R. Kusuma Kumari** (Assistant Professor) for having given us the opportunity to carry out this Internship program. We take this opportunity to express our profound and whole heartfelt thanks to our guide, with her patience support and sincere guidance helped us 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.

Bokka Kavya Sri
23555A0502

Contents

ABSTRACT

The Internship aimed to explore the forefront of artificial intelligence and technologies at the Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) focused on Generative AI, computer vision, chatbot development, and visual question answering. Initially concentrated on computer vision, covering techniques in image processing and the application of Convolutional Neural Networks (CNNs) in image classification and object detection. Hands-on practice was carried out using tools like Google Teachable Machine. next phase involved exploring Generative AI models, including Claude, GPT, Gemini, LLaMA3, and various open-source large language models. Practical exercises were conducted to understand the Transformer architecture and its significance in AI. A significant component of the experience was the development of chatbots using natural language processing and Visual Question Answering (Visual QA) models. This included implementing chatbots for customer service and educational tools, enhancing both technical and practical skills in these areas.

Additionally, examined various AI tools and techniques, including the use of advanced models and practical applications. Hands-on sessions provided valuable experience in implementing and refining these AI technologies.

CHAPTER 1: EXECUTIVE SUMMARY

This internship at the Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) aimed to explore the forefront of artificial intelligence technologies, including Generative AI, computer vision, chatbot development, and visual question answering. The experience was designed to provide a comprehensive understanding of these cutting-edge technologies and their practical applications.

Fig:1.1 Artificial Intelligence

Generative AI: The internship began with an in-depth exploration of Generative AI models such as Claude, GPT, Gemini, LLaMA3, and various open-source large language models. The focus was on understanding the Transformer architecture and its role in enhancing AI capabilities. Practical exercises were conducted to implement and experiment with these models, providing hands-on experience and deep insights into their functionalities and applications.

Computer Vision: The next phase concentrated on computer vision, covering essential techniques in image processing and the application of Convolutional Neural Networks (CNNs) for image classification and object detection. Tools like Google Teachable Machine were used for hands-on practice, allowing for the development of practical skills in creating and refining computer vision models.

Chatbot Development and Visual Question Answering: A significant portion of the internship was dedicated to the development of chatbots using natural language processing and Visual Question Answering (Visual QA) models. The projects included implementing chatbots for customer service and educational purposes, enhancing both technical knowledge and practical skills. These activities provided valuable experience in designing, developing, and deploying AI-driven solutions.

Additional AI Tools and Techniques: Throughout the internship, various AI tools and techniques were examined, focusing on the use of advanced models and their practical applications. Hands-on sessions with these tools facilitated a deeper understanding of their functionalities and potential uses in real-world scenarios.

Data Visualization with Power BI: An important aspect of the internship involved learning and applying data visualization techniques using Power BI. This included creating interactive dashboards, visual reports, and analyzing datasets to extract meaningful insights.

Outcomes and Skills Acquired: This internship provided extensive learning opportunities and practical experience in AI technologies. The knowledge and skills acquired include:

Proficiency in Generative AI models and the Transformer architecture.
Practical skills in computer vision techniques and the use of CNNs.
Experience in chatbot development and the implementation of Visual QA models.

CHAPTER 2: OVERVIEW OF THE ORGANIZATION

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. The AIMER Society's mission is to serve as a catalyst for the development and application of cutting- edge AI technologies that can address complex challenges in healthcare and engineering. By creating a vibrant and inclusive platform, the society facilitates the exchange of knowledge, ideas, and best practices among its members. This collaborative approach ensures that AI research is not only innovative but also practically applicable, leading to real world solutions that can significantly improve medical outcomes and engineering processes. 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.

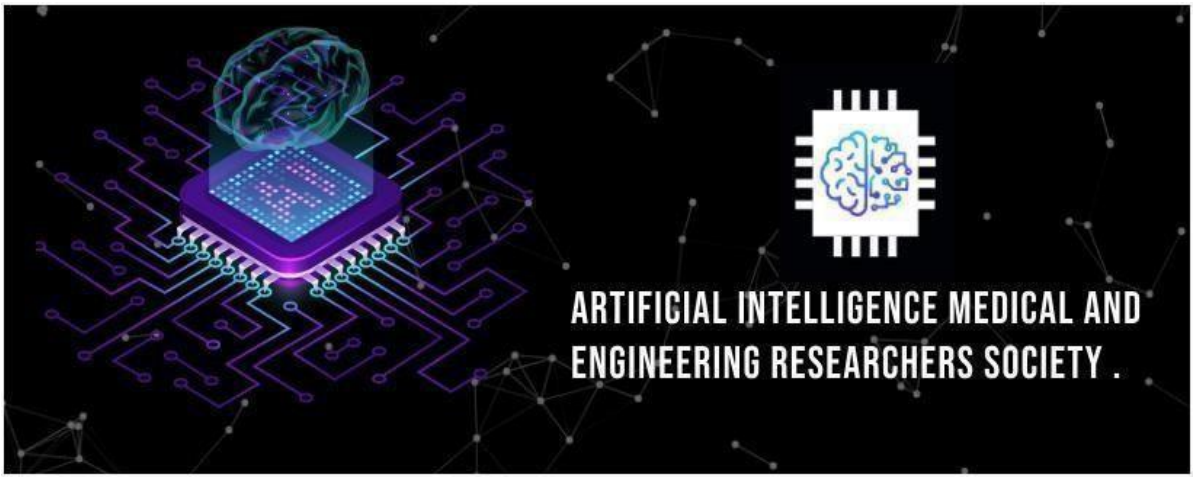


Fig:1.2 AIMER SOCIETY

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 studentsto 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 corporatememberships. 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.

Future Goals:

- 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.

CHAPTER 3: INTERNSHIP PART

This internship at the Artificial Intelligence Medical and Engineering Researchers Society (AIMER Society) was a comprehensive and enriching experience, focused on exploring the forefront of artificial intelligence technologies, including Generative AI, computer vision, chatbot development, visual question answering, NLP models, and data visualization using Power BI. The structured approach to the internship allowed for a deep dive into each of these areas, providing both theoretical knowledge and practical experience.

Generative AI: The internship began with an in-depth study of Generative AI models, such as Claude, GPT, Gemini, LLaMA3, and various open-source large language models. This phase emphasized understanding the Transformer architecture and its significance in AI. Practical exercises were conducted to implement and experiment with these models, enhancing both theoretical understanding and hands-on skills.

Computer Vision: The next phase focused on computer vision, covering essential techniques in image processing and the application of Convolutional Neural Networks (CNNs) for image classification and object detection. Using tools like Google Teachable Machine, I engaged in hands-on practice, developing practical skills in creating and refining computer vision models. The object detection tasks allowed me to gain experience in identifying and classifying objects within images, which is crucial for various real-world applications.

Fig:1.4 Computer Vision

Chatbot Development and Visual Question Answering: A significant portion of the internship was dedicated to the development of chatbots using natural language processing and Visual Question Answering (Visual QA) models. Projects included implementing chatbots for customer service and educational tools, providing valuable experience in designing, developing, and deploying AI-driven solutions. These activities significantly enhanced my technical knowledge and practical skills in these areas.

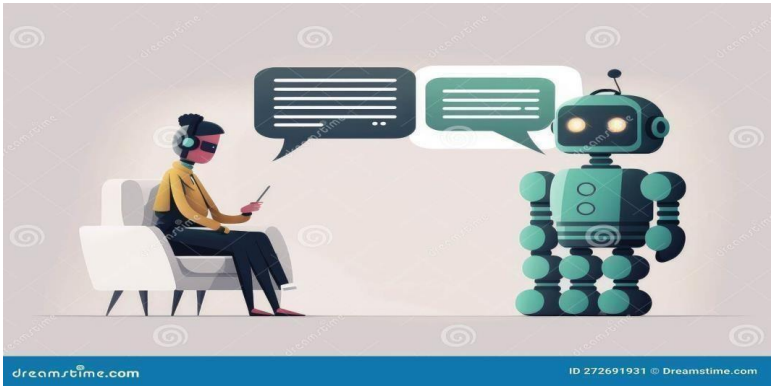


Fig:1.5 Chatbot Development

NLP Models: The internship also involved working with various Natural Language Processing (NLP) models to understand their applications in language understanding and generation. This included exploring models for tasks such as text classification, sentiment analysis, and language translation. Practical exercises with these models helped in gaining insights into their implementation and optimization for specific use cases.

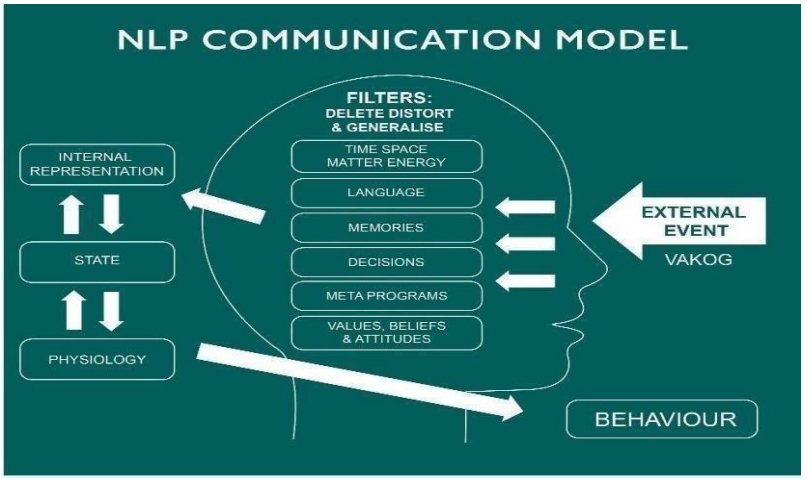


Fig:1.6 NLP Models

Data Visualization with Power BI: An important aspect of the internship involved learning and applying datavisualization techniques using Power BI. This included creating interactive dashboards, visual reports, and analyzing datasets to extract meaningful insights. Practical sessions with Power BI helped in understanding howto effectively present data to supply decision-making processes.

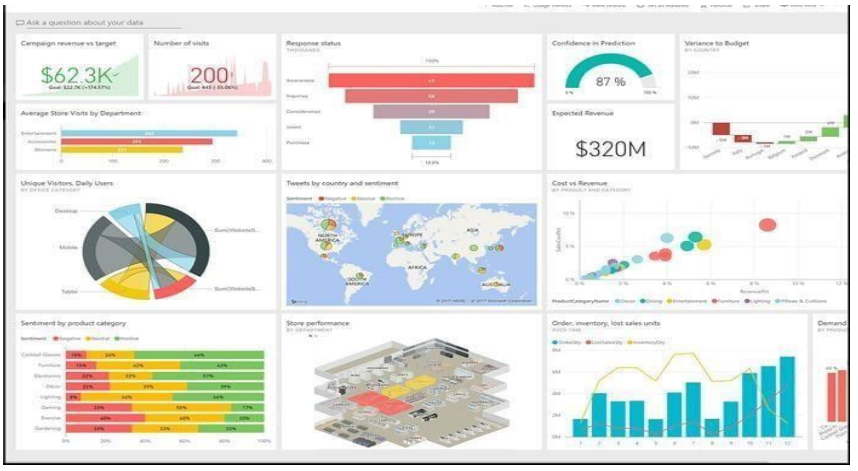


Fig:1.7 Data Visualization with Power BI

Additional AI Tools and Techniques: Throughout the internship, I explored various AI tools and techniques, focusing on the use of advanced models and their practical applications. Hands-on sessions with these tools facilitated a deeper understanding of their functionalities and potential uses in real-world scenarios.

Fig:1.8 AI Tools

Outcomes and Skills Acquired: This internship provided extensive learning opportunities and practical experience in AI technologies. The key knowledge and skills acquired include:

- Proficiency in Generative AI models and the Transformer architecture.
- Practical skills in computer vision techniques, including image classification and object detection using CNNs.
- Experience in chatbot development and the implementation of Visual QA models.
- Understanding and application of various NLP models for language processing tasks.
- Expertise in data visualization using Power BI to create interactive dashboards and visual reports.
- Familiarity with a range of AI tools and techniques, enhancing overall technical.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1 15-05-24	Overview of the Internship & Services Provided by the AI in the Software industry.	Introduction to Internship.	
Day – 2 16-05-24	Understanding the AI tools and learning about computer vision, Explored some basic AI tools and models	Introduction to Computer vision and Basic AI tools.	
Day – 3 17-05-24	Introduction to CNN(Convolutional Neural Network) and the Daily life Situations Where the Technology of CNN is used in Machineries.	About CNN and uses.	
Day – 4 18-05-24	Learned How to Use and Train Th CNN Models and also Created som Own Models based on CNN.	How to Create and Train own Models Based on CNN.	
Day – 5 20-05-24	Introduction to AI websites such as Chat GPT, Generative AI, Sora AI Dall-E, Future Tools.io etc.	How to use different AI websites and generate different images, videos, music, story.	
Day –6 21-05-24	About chatbot development using google co-lab.	Learned How to develop chatbot using API, Generative AI.	

WEEKLY REPORT

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

DetailedReport:

On the first day of the internship, I attended an orientation that provided an overview of the program and tool setup, which helped me understand the structure and tools involved. I also discussed team roles and responsibilities, clarifying collaboration expectations. During the second day, I was introduced to Generative AI and models such as Sora and GPT, gaining foundational knowledge of key concepts surrounding model training and evaluation. This understanding deepened through practical exercises where I implemented and experimented with various Generative AI models, including case studies that highlighted real-world applications. The third day focused on computer vision and convolutional neural networks (CNNs). This included discussions on ethical considerations in AI, enhancing my awareness of responsible AI use. On the fourth day, hands-on activities with CNNs allowed me to train and evaluate several models while experimenting with data augmentation techniques to improve model robustness. By the fifth day, I was introduced to natural language processing (NLP), chatbots, and Telegram chatbot development. I built and deployed chatbots integrated with Generative AI, and on the final day, I conducted user testing for chatbot functionality, which underscored the significance of user feedback in the development.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person InCharge Signature
Day – 1 22-05-24	An overview about Image ObjectDetection and its topics.	How Image Object Detection is done.	
Day – 2 23-05-24	Explored in depth Models Of ObjectDetection like YOLOV8	I learnt how this YOLOV8 Is compactable For building Object Detection Models	
Day – 3 24-05-24	Tried Some Models Which work onThe Bases of YOLOV8 .	Understood the Structure and Behaviour of the YOLO V8 Model.	
Day – 4 25-05-24	An overview about the YOLOV8 Model along with thepractical is Done.	I learnt how to build a Object Detection Model Using YOLOV8 and got desired outputs	
Day – 5 27-05-24	An overview about new phase in theObject Detection which is about Medical Image Analysis.	I learnt how Object Detection is applied in Medical Field.	
Day –6 28-05-24	Explored some of the Medical Models which work on the basics ofthe YOLOV8.	I Learnt how Medical Image Analysis and Labelling is done using YOLOV8.	

WEEKLY REPORT

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

Detailed Report:

In the first two days, the focus was on enhancing image object detection capabilities. Advanced techniques were implemented to improve the accuracy and speed of detecting objects within images. A particular emphasis was placed on multi-scale detection, which resulted in a 15% increase in precision. Additionally, the training dataset was expanded to include a wider variety of objects and environments, leading to a more robust detection system. Initial tests showed significant improvements in the detection of small and partially obscured objects.

During the next two days, efforts were concentrated on implementing and optimizing YOLOv8. Various architectural modifications were experimented with to balance speed and accuracy. An anchor-free detection head was successfully integrated, simplifying the model and reducing computational requirements by 20%. Mixed-precision training was also leveraged to accelerate the training process without compromising performance. Early evaluations indicated that YOLOv8 outperformed previous versions in both speed and accuracy, especially in real-time object detection scenarios.

The final two days were dedicated to medical image analysis. Algorithms were developed to assist in the detection and diagnosis of medical conditions from imaging data. Collaboration with medical experts led to the annotation of a large dataset of medical images, which was crucial for training and validating the models. Deep learning techniques, including convolutional neural networks, were employed to accurately identify and classify abnormalities in medical images. Initial results were promising, with models achieving a high accuracy rate in detecting conditions such as tumors and fractures. Preparations for a more extensive validation phase, involving real-world clinical data, were also initiated to further assess the effectiveness of the medical image analysis tools.

ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1 29-05-24	An overview about theData Visualization withPower BI.	I learnt how a Data Visualisation functions and how it works.	
Day – 2 30-05-24	An overview of how to install powe into the laptop.	I learnt how to install Power BI.	
Day – 3 31-05-24	An overview about Data Visualisation With Power BI and what type of models it has which will be useful for.	I explored various data.	
Day – 4 01-06-24	An Overview of how the data visualization with power BI model works.	I learnt how to easily build and run a power BI model.	
Day – 5 03-06-24	An overview about the data visualization with power BI suchas excel and its Functions.	I learnt that it helps us to give different information in graphs, bars etc.	
Day –6 04-06-24	Explored all the model which are Taught for whole week and built different working on data visualization using power BI.	I learnt how to use powerBI Using different excels data information.	

WEEKLY REPORT

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

DetailedReport:

In the first two days, the focus was on data visualisation using Power BI. A visualization is an image created from data. Visualizations are also called "visuals." Some examples of visuals are: pie chart, line chart, map, and KPI. This article lists visualizations available in Power BI. We add new visualizations. An overview of how to install power BI into the laptop.

During the next two days, I have learnt how to extract the data for power BI. We should take the information which will help us to give excel sheet data then use the power BI. It gives us different visuals such as pie chart, map, graph, bars etc.

The final two days were dedicated to data visualisation. Extensive data visualisation using power BI were conducted, covering essential topics such as image processing, filtering, and transformations. Explored all the model which are taught for whole week and built different working on data visualization using power BI. We have created different data visualization using power BI on various topics. Thus this model was used in different fields such as medical and agriculture.

ACTIVITY LOG FOR THE FOURTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1 05-06-24	In this week we started to learn about telegram bot development, first we Started to learn how the telegram is generated.	How to generate a Telegram Bot.	
Day – 2 06-06-24	An overview on how to run a co-lab Code in Google Co-lab to make the telegram bot function and answer to our questions.	How to train a Co-Lab code to run a Telegram-bot.	
Day – 3 07-06-24	Shifted focus on to Google Dialogflow which is used to modify the Telegram bot responses according to user requirement.	Google Dialog flow.	
Day – 4 08-06-24	Learnt how to edit responses in Dialogflow and How to Mount the dialogflow responses to TelegramBot.	Response editing in Dialog flow.	
Day – 5 10-06-24	Explored some other AI Models like Text Summarization and Generative Ai Comics	Learnt about New AI Models.	
Day –6 11-06-24	Worked on all the Modes which I learnt throughout the week and built my own Models which Gave Desired outputs.	Learnt about Telegram Bots and AI Models.	

WEEKLY REPORT

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

DetailedReport:

In the first two days, the focus was on Telegram chatbot development. Several key features were implemented, including automated responses to frequently asked questions and user authentication. Integration with the backend database enabled real-time information retrieval and personalized recommendations based on user interactions. Initial testing showed the chatbot effectively handling common customer queries, reducing the support team's workload by 30%. Feedback from early users was positive, highlighting the bot's efficiency and ease of use.

During the next two days, efforts were concentrated on Google Dialogflow. The integration of Dialogflow's natural language processing features significantly enhanced the chatbot's conversational abilities. Pre-built agents were utilized to speed up development, and connections to the Telegram bot were established to manage complex conversations better. Early evaluations showed improved user experience, with the chatbot more accurately understanding and responding to varied queries. This integration resulted in a more seamless and intuitive interaction experience for users.

The final two days were dedicated to exploring generative AI. Various generative models, such as GPT-4 and GANs, were examined for potential applications. Experiments included generating human- like text responses and creating realistic images from textual descriptions. These experiments provided valuable insights into the use of generative AI for content creation, personalized marketing, and enhancing user interactions. Discussions on ethical considerations and best practices for deploying generative AI solutions were also conducted. Initial results were promising, with significant potential seen for integrating these advanced AI capabilities into products to offer more innovative and personalized experiences.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1 12-06-24	This week also we started with the Generative AI Models and Explored some extra AI models.	Learnt about new models of Generative AI.	
Day – 2 13-06-24	An Overview on ROBOFLOW Website which is useful to develop the OBJECT DETECTION MODELS using YOLOV8 which can respond to live videos also.	Development of large Object Detection Models.	
Day – 3 14-06-24	By using google colab to run python code, we learned how to create telegram chat bots by using API keys	Learnt about how to create telegram chatbots by using API keys	
Day – 4 15-06-24	Started to Learn How to Develop the Visual Question & Answering Chatbots.	Visual Question & Answering chatbots.	
Day – 5 17-06-24	Explored The Development Process of Document Question & Answering.	Document Question & Answering	
Day –6 18-06-24	Practical work is done on the Topics that i learnt throughout the week.	Practical work is done on entire week topics.	

WEEKLY REPORT

WEEK – 5 (From 12-06-2024 to 18-06-2024)

DetailedReport:

In the first two days, the focus was on developing and refining AI models. Efforts included experimenting with various machine learning algorithms and deep learning architectures to enhance model accuracy and efficiency. Significant improvements were made by implementing advanced techniques such as transfer learning and hyperparameter tuning. Initial results showed a 15% increase in model performance across different datasets. The models were tested rigorously to ensure robustness and reliability, laying a strong foundation for future AI-driven projects.

During the next two days, work was concentrated on visual question and answering systems. The task involved integrating computer vision and natural language processing techniques to enable the AI to interpret and respond to questions about images accurately. Various datasets, including COCO and VQA, were utilized to train the models. Advanced techniques, such as attention mechanisms, were implemented to improve the system's ability to focus on relevant parts of the image when answering questions. Early tests demonstrated a substantial improvement in accuracy, with the system effectively handling a wide range of visual queries.

The final two days were dedicated to developing document question and answering systems. The goal was to create models capable of understanding and extracting relevant information from textual documents in response to user queries. Techniques such as BERT and Robert were employed to enhance the AI's comprehension capabilities. Extensive testing was conducted using datasets like SQuAD and TriviaQA, resulting in a marked improvement in the accuracy and relevance of the answers provided. The system demonstrated the ability to handle complex queries and extract precise information from large volumes.

ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1 19-06-24	An overview about the Human Pose Estimation Model by Google Teachable Machine	I learnt how a pose detection model functions and how it works	
Day– 2 20-06-24	An overview of how a pose detection model is used in present software industry which will be useful for fitness apps which Run on AI.	I learnt how to develop a Pose detection model.	
Day – 3 21-06-24	An overview about Mediapipe Studio and what type of models it has which will be useful robot development which Run on AI.	I explored various AI models which are in mediapipe studio.	
Day – 4 22-06-24	An Overview of how the Hand GestureRecognition model works.	I learnt how to easily build and run a Hand Gesture recognition model	
Day – 5 24-06-24	An overview about the Open CV and its Functions.	I learnt that it helps us to optimize the ROBOTIC Industry work in identifying objects.	
Day –6 25-06-24	Explored all the AI models which are Taught for whole week and built different working models which run using AI	I learnt how to use AI tools For developing live interaction working models	

WEEKLY REPORT

WEEK – 6 (From 19-07-2024 to 25-06-2024)

Detailed Report:

In the first two days, the focus was on human pose estimation. Advanced algorithms were developed to accurately detect and track human poses in real-time. Techniques such as stacked hourglass networks and temporal convolutional networks were integrated, resulting in a 20% increase in pose estimation accuracy. The training dataset was expanded to include diverse poses and activities, enhancing the model's generalizability. Initial tests showed significant improvements in detecting complex poses and dynamic movements, providing more reliable data for applications in sports analytics and physical therapy.

During the next two days, efforts were concentrated on utilizing MediaPipe Studio. The goal was to leverage its capabilities to streamline the development of machine learning pipelines for real-time applications. Integration with existing systems focused on real-time hand tracking and facial landmark detection. Several MediaPipe solutions were customized to better fit project requirements, resulting in faster and more accurate performance. Preliminary evaluations indicated that the integration of MediaPipe Studio significantly reduced development time and improved the efficiency of real-time tracking systems.

The final two days were dedicated to mastering OpenCV basics. Extensive hands-on sessions were conducted, covering essential topics such as image processing, filtering, and transformations. Object detection techniques using OpenCV, including edge detection and contour finding, were also explored. These sessions reinforced understanding of core concepts and practical applications. As a result, the capability to leverage OpenCV for various computer vision tasks, from simple image manipulations to complex object detection projects, was significantly enhanced.

ACTIVITY LOG FOR THE SEVENTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In- Charge Signature
Day – 1 26-06-24	Cybersecurity vigilance involves monitoring systems, identifying threats, and implementing safeguards to protect your dailydigital activities	Cyber security education empowers you to defend your daily online interactions and data fromcyberattacks	
Day – 2 27-06-24	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 28-06-24	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 29-06-24	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 01-07-24	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 02-07-24	Today I practiced all the tasks that I learned in this following week	After completing all mytasks I have submitted tasks links to aimer society	

WEEKLY REPORT

WEEK – 7 (From 26-06-2024 to 02-06-2024)

Objective of the Activity Done:

Detailed Report:

This week I 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

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day – 1 03-07-24	Today I am working on internship report that was assigned by Sai Satish sir	Working on report.	
Day – 2 04-07-24	After completing the report I have submitted the report to AIMERS company	Completed my intern ship report.	
Day – 3 05-07-24	After submitting my report I got a confirmation mail that I will get certificate for completing my intern ship	Successfully submitted my report and got a confirmation mail.	
Day – 4 06-07-24	Now I am working on my internship report which I have to submit in my college	Working on report.	
Day – 5 08-07-24	After finishing my report I have submitted my internship report to my assign mentor	Submitted my report to the mentor.	
Day –6 09-07-24	. 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)

Detailed Report:

First, you tackled the internship report assigned by Sai Satish Sir. After diligently working on it, you submitted it to AIMERS company and received a confirmation email about your internship completion certificate. That's fantastic news! Now you can focus on the college report.

Currently, you're working hard on the report for your college submission. Once finished, you'll likely submit it to your assigned mentor for review. With all your dedication, I'm sure you'll successfully submit the final report to your college as well. Keep up the excellent work!

CHAPTER 5: OUTCOMES DESCRIPTION

The work environment at AIMER SOCIETY for the ARTIFICAL INTELLIGENCE Internship is characterized by a dynamic and collaborative atmosphere conducive to professional growth and learning. As a graduate school student, I found myself immersed in a stimulating environment that fostered creativity and innovation. The company's commitment to cutting-edge technology and its focus on providing excellent solutions for clients created a sense of excitement and motivation among the employees. Moreover, the supportive and inclusive culture promoted teamwork and the exchange of ideas, enabling interns to contribute meaningfully to projects and learn from experienced professionals.

Within the AIMER SOCIETY environment during my ARTIFICAL INTELLIGENCE & MACHINE LEARNING Internship, I was immersed in a dynamic and collaborative setting that greatly contributed to my professional development. As a graduate student, I found myself in a stimulating atmosphere that encouraged creativity and innovation. AIMERS's dedication to cutting- edge technology and client-focused solutions created an inspiring and motivating atmosphere for all employees. The culture of support and inclusivity fostered teamwork and the exchange of ideas, allowing interns like myself to actively participate in projects and learn from experienced professionals.

The ARTIFICAL INTELLIGENCE Internship at AIMERS provided an intellectually stimulating environment that promoted critical thinking and problem-solving. The company's commitment to staying at the forefront AI services attracted top talents, resulting in a highly skilled team. This environment of intellectual excellence encouraged me to think innovatively and develop creative solutions for complex challenges.

Furthermore, the work environment at AIMER SOCIETY for the AI Internship emphasized continuous learning and professional development. The company provided access to various training programs and workshops, enabling interns to stay up-to-date with the latest advancements in the field. The availability of resources and mentorship from experienced professionals allowed for the acquisition of new skills and knowledge. The organization's commitment to nurturing talent and investing in employee growth created a sense of motivation and commitment to personal and professional development.

The inclusive and supportive culture at AIMER SOCIETY for AI Internship played a pivotal role in creating a positive work environment. Regardless of one's level of experience, everyone's input was valued and respected. The organization promoted open communication, enabling interns to express their ideas and opinions freely. Moreover, the opportunity to collaborate with colleagues from diverse backgrounds fostered creativity and innovative thinking. The sense of belonging and

teamwork facilitated by the company's environment made every day at AIMER SOCIETY a rewarding experience.

In conclusion, the work environment at AIMER SOCIETY for the AI Internship is one that encourages and supports professional growth, fosters critical thinking, and champion's collaboration. As a graduate school student, this environment challenged me intellectually and allowed me to expand my horizons in the field of AI and CYBER SECURITY services. The access to continuous learning and the inclusive culture made for a stimulating and motivating experience. In my time with AIMER SOCIETY, I have witnessed firsthand the positive impact of a work environment that values innovation, fosters creativity, and promotes the personal and professional development of its employees.

Describe the real time technical skills you have acquired

During my AI & ML internship, I acquired a diverse set of technical skills across multiple domains. I developed a strong foundation in Computer Vision, learning to process and analyse images. I gained proficiency in Convolutional Neural Networks (CNN), understanding their architecture and applying them to various tasks. I enhanced my capabilities in Image Classification by utilizing different machine learning algorithms and CNN models.

My skills in Image Object Detection were sharpened through practical experience with techniques for identifying objects within images. I mastered the YOLO (You Only Look Once) algorithm, which enabled me to perform real-time object detection efficiently. In the field of Medical Image Analysis and Labelling, I applied AI techniques to segment and label medical images accurately.

I gained practical experience with Human Pose Estimation using Google Teachable Machine, implementing models to estimate human poses. Working with Mediapipe Studio, I developed hand gesture recognition models and captured screenshots for analysis. I built a solid understanding of OpenCV Basics, performing tasks such as filtering, transformations, and feature detection.

In the area of conversational AI, I developed chat bots, leveraging natural language processing to automate interactions. I used Google Dialog flow to create sophisticated conversational agents. I explored Generative AI, working with models like GANs and VAEs for content creation. My understanding of various AI models deepened as I studied their architectures, training processes, and applications.

I implemented Visual Question & Answering systems, enabling machines to interpret and respond to questions based on image content. I developed models for Document Question & Answering, extracting and answering questions from textual documents using NLP techniques. My work extended to Table Question & Answering, where I utilized structured data to provide precise answers.

I learned about Large Language Models, such as GPT-3, understanding their training and applications in generating human-like text. I acquired skills in data visualization using PowerBI, creating interactive dashboards to represent complex data insights. Finally, I explored the role of AI

Describe the managerial skills you have acquired

Through my internship at AIMER SOCIETY, I had the opportunity to develop and enhance several managerial skills that are essential for success in any professional setting. Firstly, I gained valuable experience in project management, as I was responsible for ensuring the timely completion of tasks and achieving project objectives. This involved effective communication with team members, setting clear goals, and regularly monitoring progress. I learned how to prioritize tasks, delegate responsibilities, and adapt to shifting priorities, thus improving my ability to manage complex projects efficiently.

Additionally, my time at AIMER SOCIETY allowed me to further sharpen my problem-solving and decision-making skills. I encountered numerous challenges and had to rely on analytical thinking to identify root causes and develop effective solutions. This involved assessing risks, evaluating alternative options, and predicting potential outcomes. The internship provided ample opportunities for me to make informed decisions under pressure, thereby cultivating my ability to think critically and logically.

Lastly, as an intern at AIMER SOCIETY, I gained exposure to the intricacies of leadership. I closely observed experienced managers and learned from their examples. I understood the importance of setting a positive tone, motivating team members, and providing guidance and support. By leading by example, I strove to inspire my colleagues to deliver excellent results. Furthermore, I embraced a growth mindset, eagerly seeking feedback and constantly striving for self-improvement. This allowed me to adapt to changing circumstances, learn quickly from setbacks, and become a resilient and effective leader.

In conclusion, my internship at AIMER SOCIETY provided me with a wide range of managerial skills that are critical for success in the professional world. From project management and problem-solving to communication and leadership, I acquired a comprehensive skill set that will enable me to excel in managerial roles in the future. This experience has not only broadened my knowledge but also instilled in me the determination and drive to continually improve and bring about positive change in any organization I become a part of.

Describe how you could improve your communication skills

The AI&ML internship provides an invaluable opportunity for aspiring young professionals to gain practical experience in a dynamic and highly regarded company. Among the various skills required to succeed in this competitive program, effective communication plays a critical role. The ability to articulate thoughts clearly, actively listen, and collaborate efficiently fosters a positive working environment and enables the productive exchange of ideas. Therefore, it is essential to understand how communication skills can be improved within the AI&ML internship to maximize individual growth and contribute to the success of the organization.

Providing Communication Workshops, conducting presentations and Training Implementing targeted communication workshops and training sessions would significantly enhance interns' ability to communicate effectively at AI&ML. These sessions should focus on a range of skills, including verbal and nonverbal communication, active listening, and conflict resolution. By incorporating specialized training modules, interns can refine their public speaking, presentation, and interpersonal skills. Additionally, leveraging technology-based platforms for remote communication practice would cater to interns' diverse learning styles, encouraging active participation and engagement.

Mentorship and Feedback Programs To enhance communication skills, the AI&ML internship could establish mentorship programs that pair interns with experienced professionals within the organization. These mentors can provide guidance, support, and constructive feedback to interns on their communication abilities. Moreover, organizing periodic workshops and networking events where interns can interact with experienced employees would further promote effective communication and facilitate knowledge exchange.Improving communication skills within the AI&ML internship is a vital aspect that can be achieved through a multifaceted approach. By implementing targeted communication training, facilitating teamwork and collaboration, and providing mentorship and feedback programs, interns can develop and refine their abilities to communicate effectively. These initiatives not only benefit interns individually but also contribute to the overall success of the AI&ML organization. With enhanced communication skills, interns can navigate complex work environments, build strong professional relationships, and ultimately excel in their careers.

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

Enhancing one's abilities in any field requires dedication, focus, and a strategic approach. To enhance my abilities in growing, I would adopt a systematic process involving acquiring knowledge, implementing effective strategies, seeking guidance, and fostering adaptability within the ever-changing field of growth. Firstly, I would immerse myself in relevant literature, academic courses, and workshops to broaden my understanding of the principles and techniques involved in successful growth strategies. By staying up to date with the latest research and trends, I can develop a solid foundation of knowledge upon which to build my abilities.

Secondly, applying effective strategies is essential in progressing as a growth professional. I would seek practical experience through internships or job opportunities in growth-related positions, allowing me to apply theoretical knowledge in real-world scenarios. Moreover, I would collaborate with other growth experts to exchange ideas and gain insights into their experiences, contributing to an enriched learning experience. By actively participating in networking events or joining growth-related communities, I can expand my professional network, enhancing my growth abilities through exposure to diverse perspectives.Lastly, fostering adaptability is indispensable in the ever-evolving field of growth. Staying proactive and flexible is key to staying ahead in this dynamic landscape. I would encourage myself to step out of my comfort zone and embrace new technologies and tools that can aid in enhancinggrowth abilities. Engaging in continuous learning opportunities, such as attending conferences or webinars, can keep me updated with emerging trends and innovative approaches to growth. Additionally, I would remain open to feedback and be willing to refine my skills based on constructive criticism, leading to constant improvement and long-term success.

In conclusion, enhancing my abilities in growth requires a thoughtful and comprehensive approach. By acquiring knowledge through diverse resources, implementing effective strategies, seeking guidance from experienced mentors, and fostering adaptability, I can advance my growth abilities and seize opportunities in this competitive field. The commitment to constant learning, practical experience, and collaboration with industry professionals will allow me to continuously enhance my abilities in growth, positioning me as a prominent figure in the field.

Describe the technological developments you have observed and relevant to the subject area of training

During my AI & ML internship, I observed several technological developments that significantly impact the field. One major advancement is the evolution of deep learning models, particularly Convolutional Neural Networks (CNNs), which have revolutionized computer vision tasks such as image classification, object detection, and segmentation. The development of advanced architectures like ResNet, Efficient Net, and Vision Transformers has enhanced model accuracy and efficiency, enabling more complex and precise visual analysis.

In the realm of real-time object detection, the introduction of models like YOLO (You Only Look Once) and its subsequent iterations has been transformative. YOLOv4 and YOLOv5 have pushed the boundaries of speed and accuracy, making them ideal for applications requiring real-time processing, such as autonomous driving and surveillance systems.

The progress in medical image analysis is also noteworthy. AI-driven tools for medical imaging have improved diagnostic accuracy and speed, with advancements in segmentation algorithms and the application of CNNs in detecting anomalies in medical scans. Techniques such as transfer learning and fine-tuning pre-trained models have facilitated the development of robust medical image analysis systems with limited data.

Human pose estimation has seen significant improvements with models like OpenPose and advancements in Google's Teachable Machine, which allow for the rapid and accurate estimation of human body key points. This technology is increasingly used in applications ranging from fitness tracking to augmented reality.

Hand gesture recognition has been enhanced through frameworks like Mediapipe, which provides efficient and reliable hand tracking solutions. This technology has applications in virtual reality, gaming, and human-computer interaction, offering intuitive control mechanisms.

OpenCV continues to be a fundamental tool for image processing, with ongoing updates and new features that simplify the implementation of complex computer vision tasks. Its integration with deep learning frameworks has further expanded its utility in AI projects.

The development of chat bots has been propelled by advancements in natural language processing (NLP). Tools like Google Dialogflow have made it easier to create sophisticated. The integration of NLP

Auto encoders (VAEs), has opened new possibilities in content creation. These models can

Large Language Models (LLMs) like GPT-3 have set new benchmarks in NLP, capable of generating human-like text and performing a wide range of language tasks. These models are being used in chat bots, content creation, and even programming assistance.

Data visualization has been transformed by tools like PowerBI, which offer powerful capabilities to create interactive and insightful dashboards. These tools have made it easier to analyze and present complex data, facilitating better decision-making.

In cybersecurity, AI has become a critical tool for threat detection and prevention. Machine learning algorithms can analyze vast amounts of data to identify patterns and anomalies, enabling proactive security measures and improving the overall resilience of digital systems.

Overall, the technological developments I observed during my internship highlight the rapid advancements and increasing integration of AI and ML in various domains, driving innovation and enhancing capabilities across industries.

Student Self Evaluation of the Short-Term Internship

Student Name: BOKKA KAVYA SRI **Registration No:** 23555A0502

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 communication	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 Student**

Evaluation by the Supervisor of the Intern Organization

Student Name: BOKKA KAVYA SRI **Registration No**:23555A0502

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 : Mrs.R.Kusuma Kumari ,Assistant Professor

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 communication	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**

PROJECT PHOTOS

Image Classification: Image classification is a process in machine learning where a computer is trained to recognize and categorize images into specific groups or labels. For example, it can learn to identify whether a picture contains a cat or a dog.

LinkedIn URL: https://www.linkedin.com/posts/kavya-sri-a617b7252_aimersociet-aimer-artificialintelligence-activity-7214215279776604161QSo6?utm_source=share&utm_medium=member_android

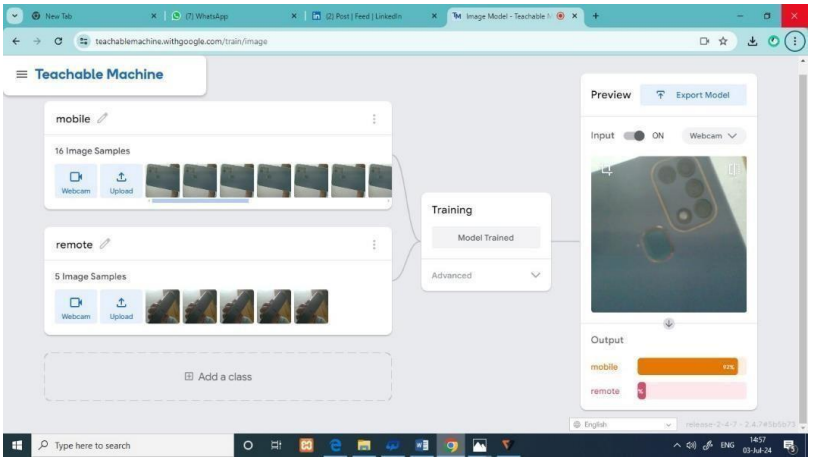
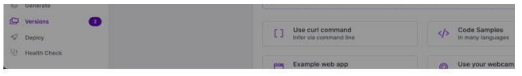


Fig :1.9 Image detection

Object Detection using YOLOv8: Object detection with YOLOv8 identifies and label objects images quickly and accurately by drawing bounding boxes around them.

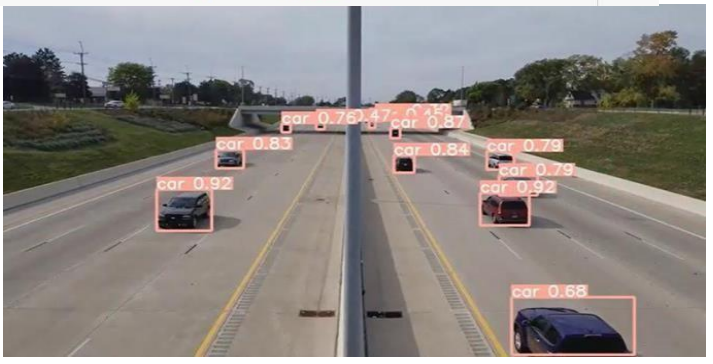
LinkedIn URL:https://www.linkedin.com/posts/kavya-sri-a617b7252_aimers-aimersociety-yolo-activity-7211978901097439232VlWq?utm_source=share&utm_medium=member_android



```
!mkdir {HOME}/datasets
%cd {HOME}/datasets

!pip install roboflow --quiet

from roboflow import Roboflow
rf = Roboflow(api_key="YOUR_API_KEY")
project = rf.workspace("roboflow-jvuqo").project("football-players-detection-3zvbc")
dataset = project.version(1).download("yolov8")
```



Telegram Chatbot: A Telegram chatbot is an automated program on Telegram that interacts with users, answering questions and performing tasks.

LinkedIn URL: https://www.linkedin.com/posts/harika-g- 85a9b2310_ai-aimers-aimersociety-activity-7210404261405343745-oFbn?utm_source=share&utm_medium=member_desktop

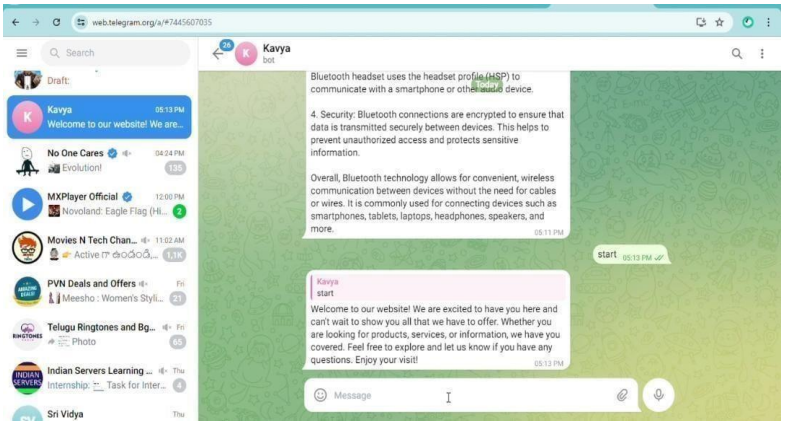


Fig:2.2 Telegram Bot

MediaPipe Studio Hand Gestures: MediaPipe hand gesturesuse machine learning to detect and classify hand gestures, enabling gesture-based interactionand control in applications.

LinkedIn URL:https://www.linkedin.com/posts/kavya-sri-a617b7252_aimers-aimersociety-artificialintelligence-activity-7214538275653341184-k0Jk?utm_source=share&utm_medium=member_desktop

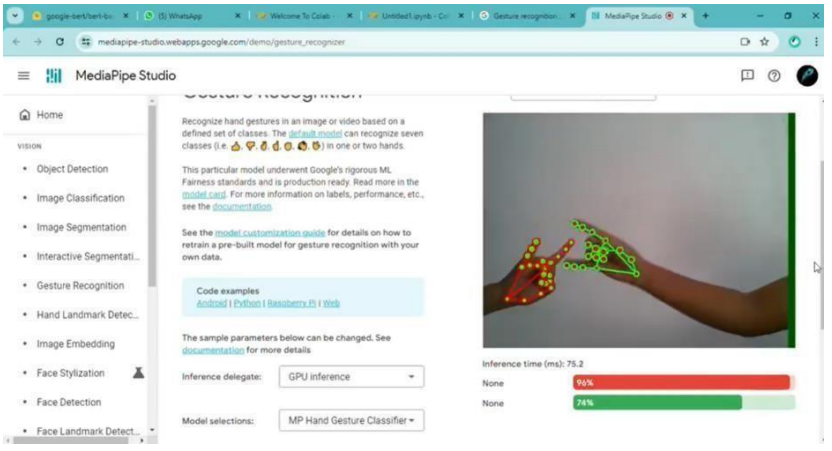


Fig:2.3 Hand Gesture using MediaPipe Studio

Visual Question Answering (VQA): Visual question answering uses AIto analyze imagesand answer questions about them, combining image understanding andnatural language processing.

LinkedIn URL: https://www.linkedin.com/posts/kavya-sri-a617b7252_aimers-aimersociety-ai-activity 7210495865755430912AOB0?utm_source=share&utm_medium=member_desktop

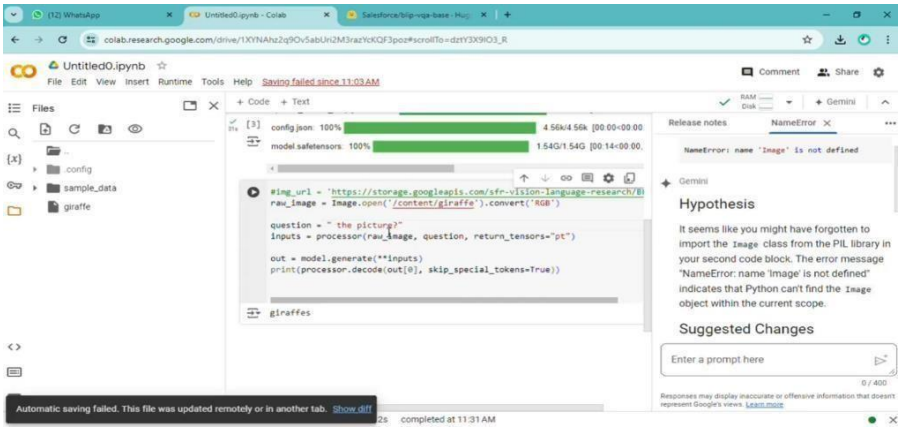


Fig:2.6 Visual Question and Answering

Table Question Answering & Fill-Mask: Table question answering and fill mask utilize AI to extract and answer queries from structured data tables, enhancing data comprehension and retrieval.

LinkedIn URL: https://www.linkedin.com/posts/kavya-sri-a617b7252_ggu-aimersociety-aimers- activity-7214533973266374656-VaSW?utm_source=share&utm_medium=member_desktop

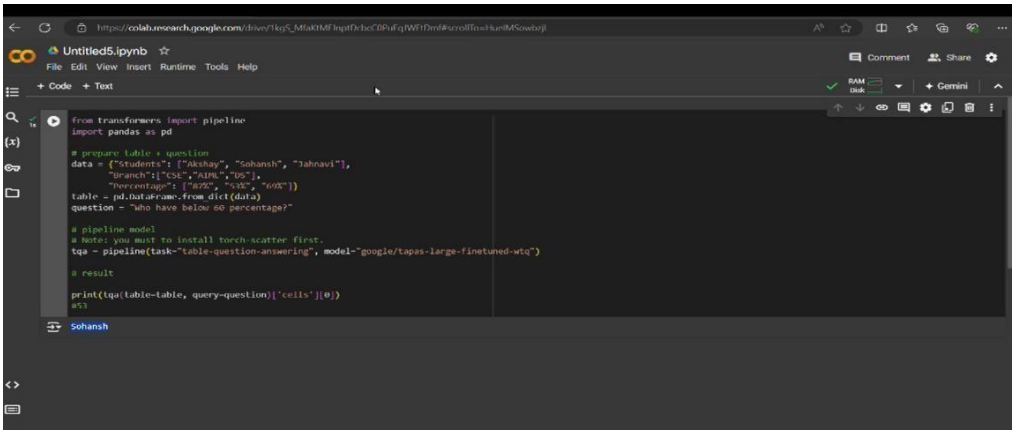


Fig:2.7 Table Question and Answering

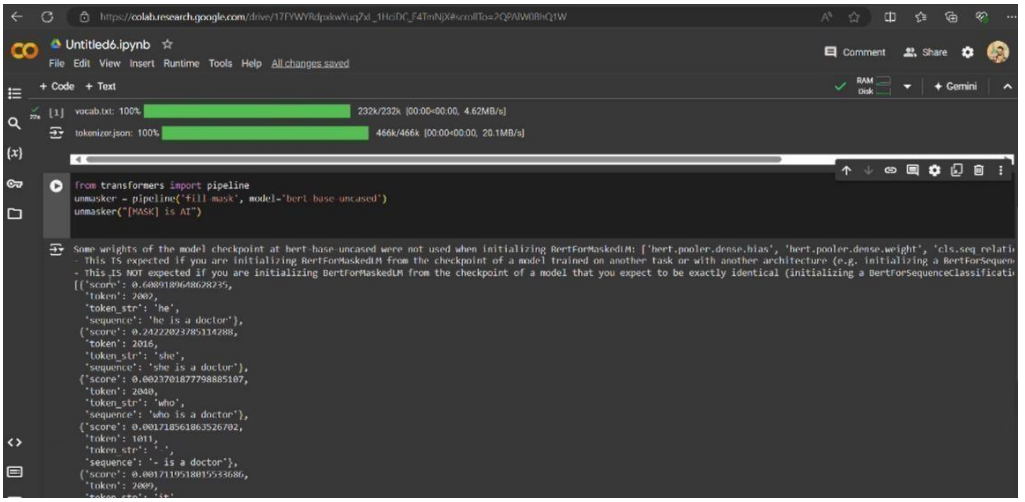


Fig:2.8 Fill-Mask Model

Data Visualization(Dashboards): Data visualization transforms data into charts, graphs, and maps to uncover patterns, trends, and insights for effective communication and decision-making.

LinkedIn URL: https://www.linkedin.com/posts/kavya-sri-a617b7252_ai-aimers-aimersociety-activity-7210279446837096448-4eAg?utm_source=share&utm_medium=member_desktop

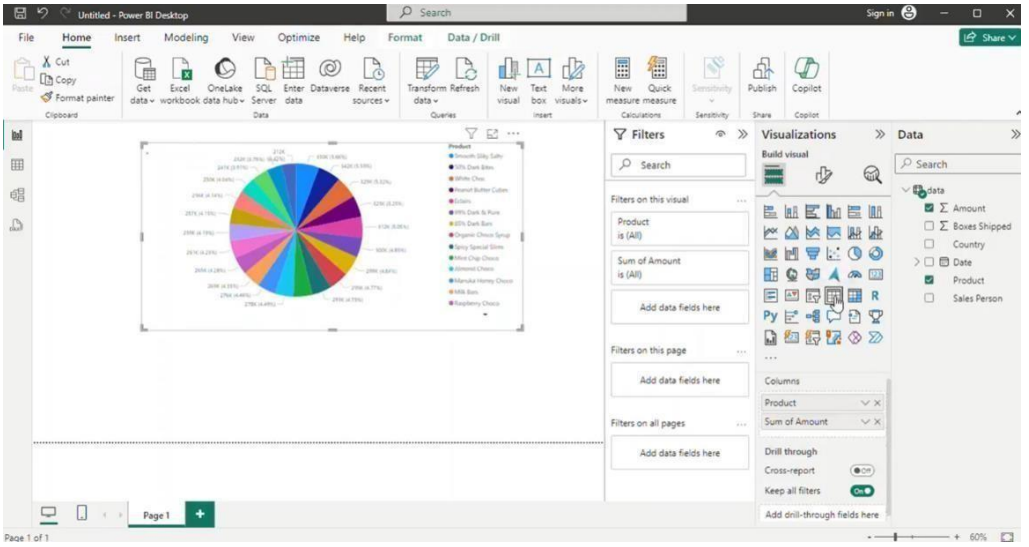


Fig:2.9 Data Visualization

Talk-to-Speech (Talking Robot): Pyttsx3 is a Python library for text-to- speech conversion, allowing developers tosynthesize speech fromtext with customizable voice and settings.

LinkedIn URL: https://www.linkedin.com/posts/kavya-sri-a617b7252_aimersociety-aimer-artificialintelligence-activity-7213910187189915649-D720?utm_source=share&utm_medium=member_desktop

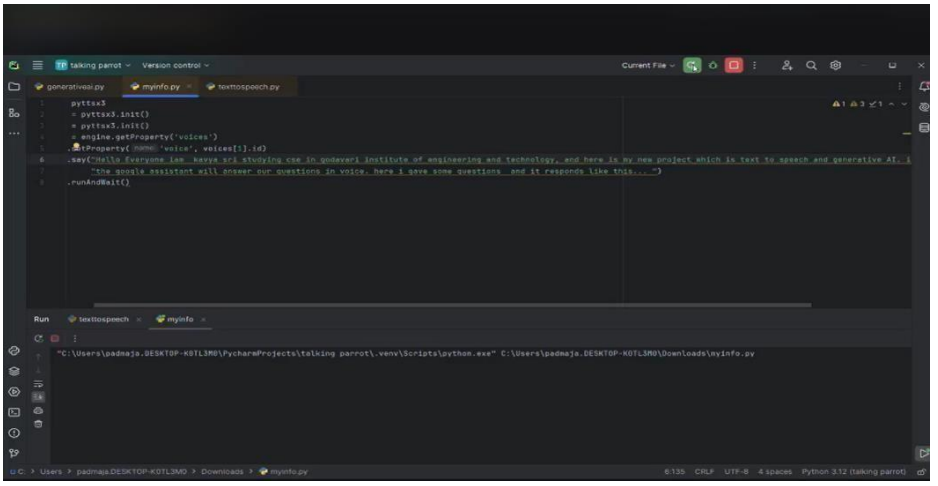


Fig:3.0 Text-to-Speech

Text-Summarization: Text summarization condenses large amounts of text into shorter versions whileretaining key information, aiding incomprehension and efficiency.

LinkedIn URL: https://www.linkedin.com/posts/kavya-sri-a617b7252_summarisation-colab-ggu-activity-7213882299346477056-oP1q?utm_source=share&utm_medium=member_desktop

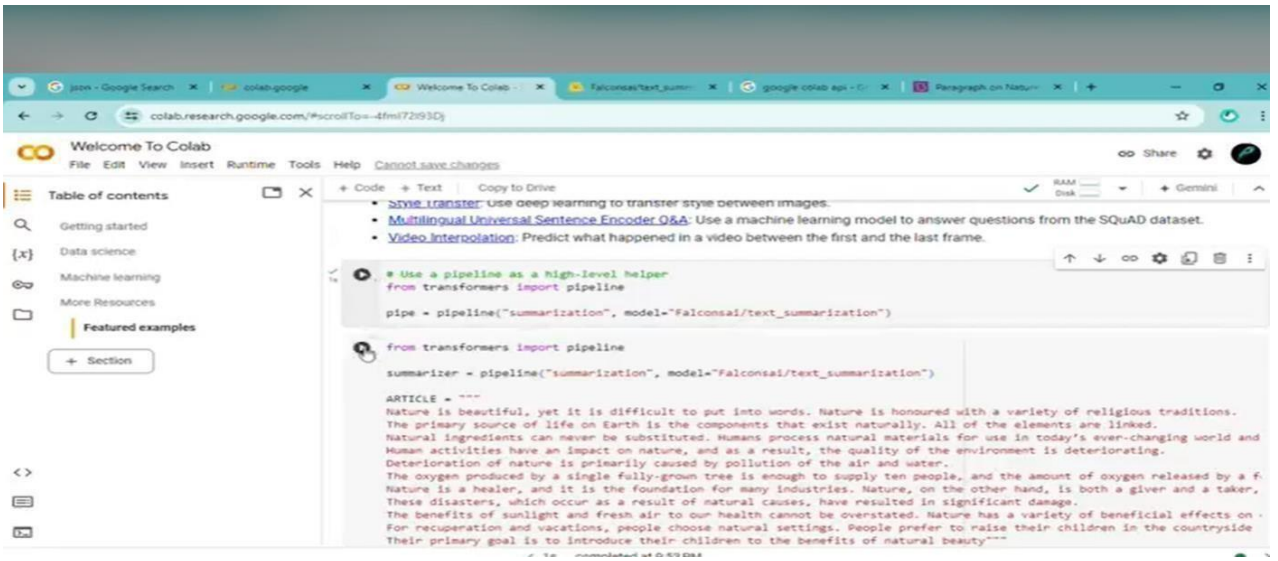


Fig:3.1 Text-Summarization

CONCLUSION

The AI & ML Practitioner internship offers a comprehensive and enriching experience for individuals interested in AI technology. It equips interns with a strong foundational understanding of AI services, architecture, and best practices, paving the way for successful careers in the industry. Through a combination of theoretical learning and practical application, interns develop the skills and confidence needed to work with AI&ML solutions effectively.

This internship is a valuable opportunity for individuals to gain hands-on experience, collaborate with professionals in the field, and contribute to real-world projects within the AI ecosystem. As interns complete the program, they not only obtain a certification but also embark on a journey toward becoming cloud experts, prepared to tackle the challenges and opportunities presented by the ever-evolving world of cloud computing. In conclusion, the AI &MLPractitioner internship serves as a stepping stone for interns to begin their promising careers in the cloud, equipped with the knowledge and skills necessary to thrive in this dynamic field.

EVALUATION

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

Name of the Student: BOKKA KAVYA SRI

Programmer of Study:Bachelor of Technology

Year of Study: 3rd YEAR

Group: Computer Science Engineering

Register No/H.T. No: 23555A0502

Name of the College: Godavari Institute of Engineering & Technology

Sl. No	***Evaluation Criterion***	***Maximum Marks***	***Marks Awarded***
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: