# INTERNSHIP REPORT

**ML Intern**

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**Company Name: Ai Adventures LLP**

## M.Sc. Data Science and Artificial Intelligence – Part 2



**RAMNIRANJAN JHUNJHUNWALA COLLEGE OF ART’S, SCIENCE & COMMERCE (AUTONOMOUS), GHATKOPAR (W)**

APRIL - 2023

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**Certificate**

*This is to certify that the “***Internship report***”* submitted by **Muhammed Rehan Shaikh** *bearing Seat No* ***729*** *is work done by him* and *submitted during 18th January 20223 and 20th April 2023 requirements for the award of the Degree of* ***Master of Science*** *in* ***Data Science & Artificial Intelligence.***

**Signature of Internal Guide Signature of Co-Ordinator**

**College Seal and Date Signature Examiner**

# ACKNOWLEDGEMENT

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**INTRODUCTION**

I am pleased to present my internship report as a Machine Learning (ML) Intern at AI Adventures, where my role was to mentor students and guide them in the fields of ML, Python, and Data Science. Mentoring is a process of guiding and advising someone who is less experienced in a particular field or domain, and as a mentor, I provided guidance, feedback, and support to the students to help them develop their skills and abilities. Throughout my internship, I was able to acquire hands-on experience in several areas, including data pre-processing, model selection, and evaluation. Mentoring is a valuable tool for personal and professional growth, and it can help individuals develop new skills, gain new perspectives, and build strong relationships that can last a lifetime. In this report, I will provide an overview of my internship experience, the skills I developed, the challenges I faced, and the solutions I implemented. Additionally, I will discuss the projects I worked on during my internship, including the goals, methodologies, and outcomes achieved. Overall, my internship at AI Adventures provided me with valuable insights into the practical applications of machine learning and data science, and I am grateful for the opportunity to have worked with such an innovative company.

# ABOUT ORGANIZATION

At AI Adventures, our mission is to democratize access to Machine Learning and Artificial Intelligence. We believe that by providing education and resources, we can empower individuals and organizations to harness the power of AI to drive innovation and growth.

Our journey began by building practical applications in Machine Learning and providing training to individuals. As we grew, we expanded our offerings to include online and offline courses, as well as corporate training programs. We understand that access to quality education is key to unlocking the potential of AI, which is why we also organize free workshops and events to spread awareness and knowledge about these technologies.

At AI Adventures, we firmly believe that the best way to learn is through hands-on experience. That’s why all of our courses are designed to be highly practical and application-oriented. We provide assignments and capstone projects for learners to work on and promote discussion among students and mentors. We also understand that Machine Learning is a skill set that is relevant to every industry and not just for those with advanced mathematical backgrounds. That’s why we’ve made sure that our course material is simple and easy to understand, without sacrificing on the depth of the content.

Our goal is to make Machine Learning accessible to everyone, regardless of their background or experience. We believe that with the right approach and the right resources, anyone can learn to harness the power of AI to drive innovation and growth. Join us in our mission to make Machine Learning a must-have skill set for everyone.

# Learning outcome/Objectives

**Learning Outcome:**

* Internships are generally thought of to be reserved for college students looking to gain experience in a particular field. However, a wide array of people can benefit from Training Internships in order to receive real academic experience and develop their skills set.
* An objective for this position emphasize the skills I already possess in the area of my interest in learning and more.
* Internships are utilized in a number of different career fields i.e. statistics and artificial intelligence, including python programming, logic building machine learning, model building, deployment and many more.
* Internship is allow me to perform scientific research while others are specifically designed to allow people to gain first-hand experience working.
* Mentoring internships is a great way to build your knowledge and develop skills that can be emphasized in your strength and confidence for future growth in my domain.

**Objectives:**

1. Developing technical skills: One of the primary objectives of mentoring an ML enthusiast is to help them develop technical skills related to ML. This can include learning about different ML algorithms, programming languages, tools and techniques for data analysis, and more.
2. Providing guidance on best practices: Mentors can guide ML enthusiasts on best practices when it comes to ML. This can include things like data preprocessing, model selection, evaluation metrics, and more.
3. Sharing industry knowledge: Mentors can also provide insights into the latest trends and developments in the industry, as well as share their own experiences and knowledge gained through years of practice.
4. Developing soft skills: In addition to technical skills, mentors can also help ML enthusiasts develop soft skills such as communication, leadership, and problem-solving. These skills can be essential in the workplace and can help the mentee advance in their career.
5. Providing motivation and support: Lastly, a mentor can provide motivation and support to an ML enthusiast. They can help the mentee set goals and stay focused on achieving them, as well as provide emotional support during times of frustration or uncertainty.

# Mentoring & project guidance.

* Providing guidance on Python basics: Start by ensuring that the ML enthusiast has a good understanding of Python basics. This can include topics such as data types, control flow statements, functions, and modules. Ensure that they are comfortable with these concepts before moving on to more advanced topics.
* Encouraging a problem-solving mind-set: Encourage the mentee to approach programming with a problem-solving mind-set. This means helping them to break down complex problems into smaller, more manageable ones and guiding them in choosing the right tools and techniques to solve them.
* Introducing them to libraries and frameworks: Introduce the mentee to popular libraries and frameworks in the data science field such as NumPy, Pandas, and Scikit-learn. Explain how these tools can be used to make data science tasks easier and more efficient.
* Giving feedback on code: Review the mentee's code and provide feedback on areas that could be improved. This can include suggesting more efficient ways to write code, or pointing out logical errors that may be present.
* Encouraging experimentation: Encourage the mentee to experiment with different approaches and techniques when working on their project. This can help them to develop a deeper understanding of the concepts they are learning, and can also lead to more creative and innovative solutions.
* Providing guidance on project design: Help the mentee to design their project, including identifying the problem they want to solve, defining the data they need to collecting the data from various sources like Kaggle, Web Scrapping, API, etc and choosing the right algorithms to use. Provide guidance on best practices when it comes to project design, such as using clear and concise code, documenting the project, and creating visualizations to communicate results.

# CHALLENGES

* Challenges Understanding the Different teaching Challenges.
* Student level of understanding.
* Lack Of domain knowledge of student.
* Lack of Effective Communication.
* Being Encouraging and Motivating Under Challenging Times.
* Disciplining Students

# CONCLUSION

In conclusion, my mentorship internship has been a valuable experience that has helped me gain a deeper understanding of my subject and its practical applications. Through this internship, I was given the opportunity to explore the field of Artificial Intelligence and expand my knowledge and skills in this domain. I now realize the importance of patience, confidence, and effective communication in mentoring, especially when faced with challenging tasks and obstacles. I am grateful for the guidance and support provided by my supervisors, Mr. Vivek Deshpande sir and Pranav sir, and for the opportunity given by my them to intern at such a prominent Institute. This internship has been a wonderful learning experience and has equipped me with skills that will be useful throughout my career.