

**IT INTERN
AN INTERNSHIP PROPOSAL**

Submitted by

BHESDADIYA DAKSH ANILBHAI

210160116054

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Table of Contents

1. INTRODUCTION.....	1
2. COMPANY OVERVIEW.....	2
3. INTERNSHIP OBJECTIVES.....	3
4. WORK METHODOLOGY & TECHNOLOGIES USED.....	4
4.1 WORK METHODOLOGY.....	4
4.2 TECHNOLOGIES USED.....	4
5. INTERNSHIP TIMELINE & WORK BREAKDOWN.....	5
6. EXPECTED OUTCOMES.....	7
7. CONCLUSION.....	8

1. INTRODUCTION

- The Data Science Internship provides a comprehensive and hands-on learning experience for individuals looking to build a career in data science. Interns will work closely with experienced professionals in a collaborative environment, contributing to key projects that involve data analysis, machine learning, and predictive modeling.
- This program is designed to equip interns with a deep understanding of data science methodologies, including the use of Python and industry-standard libraries such as Pandas, NumPy, and Matplotlib. Interns will engage in tasks ranging from data preprocessing and feature engineering to the development and evaluation of machine learning models.
- The internship aims to foster technical expertise, problem-solving skills, and the ability to communicate complex data-driven insights effectively. Upon completion, interns will have gained valuable experience and professional exposure, preparing them for a successful career in the field of data science.

2. COMPANY OVERVIEW

- **Company Name** INFOLABZ IT SERVICES PVT. LTD.
- **Director Name** Mr. Chintan Nagrecha
- **External Guide** Ms. Twinkle Shah
- **Contact No.** 8866662662
- **Email Id** info@infolabz.in
- **Address** Vraj Avenue, 405, above SAM'S Pizza, nr. Commerce Six Road, Navrangpura, Ahmedabad, Gujarat 380009
- **Address** www.infolabz.in

Established in 2011, we are a distinguished entity within the IT industry, operating as a subsidiary of a prominent parent IT corporation. Our enduring presence in the market attests to our solid reputation and unwavering commitment to excellence.

Our core strength lies in our highly qualified and experienced team, meticulously prepared to confront and conquer any challenges that may arise.

Our dedicated team comprises seasoned experts proficient in a wide array of cutting-edge technologies. Additionally, we maintain specialized teams for UI/UX and graphic design. Our clientele spans the globe, with hundreds of satisfied clients benefiting from our comprehensive services.

In this segment, we maintain dedicated teams specifically tasked with API and web service management, as well as crafting contemporary material designs. Our unyielding dedication to innovation is evident in every app we create, as we continually seek to expand our horizons and knowledge with each project.

InfoLabz proudly offers industry-oriented live project training, catering to students pursuing CE/IT (BE/B.TECH & DIPLOMA ENGINEERING), BCA/MCA, BSc IT/MSc IT degrees. Our training programs provide students with invaluable hands-on experience, bridging the divide between theoretical knowledge and real-world application. This immersive experience empowers students to gain a deeper understanding of engineering principles and apply their acquired skills to develop practical software and live websites.

3. INTERNSHIP OBJECTIVES

- The Data Science Intern will work with the team to clean, analyze, and visualize data using Python and libraries like Pandas, NumPy, and Matplotlib. The intern will gain hands-on experience with data preprocessing, building predictive models, and applying machine learning algorithms.
- They will collaborate on projects, develop data visualizations, and contribute to generating insights. The internship provides mentorship and exposure to key Python-based data science tools, preparing the intern for a career in data analysis and machine learning.
- To develop proficiency in data preprocessing, analysis, and visualization using Python and its libraries while gaining hands-on experience in building predictive models and applying machine learning algorithms.

4. WORK METHODOLOGY & TECHNOLOGIES USED

4.1 WORK METHODOLOGY

- The Data Science Internship will follow an agile work methodology, with tasks and projects broken down into manageable sprints. Interns will collaborate closely with the data science team during weekly stand-ups and sprint reviews to ensure progress and alignment with project goals. The workflow emphasizes hands-on experience, iterative development, and frequent feedback to encourage learning and growth.
- The Agile Data Science Approach ensures an iterative and structured workflow by breaking tasks into manageable sprints. Interns will engage in regular stand-ups and sprint reviews, promoting collaboration, progress tracking, and continuous feedback. This methodology encourages hands-on learning, iterative development, and adaptability, providing a dynamic environment for skill enhancement in data analysis and machine learning.

4.2 TECHNOLOGIES USED

- Programming Language: Python
- Libraries: Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn etc.
- Data Handling: Jupyter Notebooks for interactive coding
- The internship will involve the use of these tools and technologies in real-world data science projects, enhancing the intern's technical skills and preparing them for the demands of the industry.

5. INTERNSHIP TIMELINE & WORK BREAKDOWN

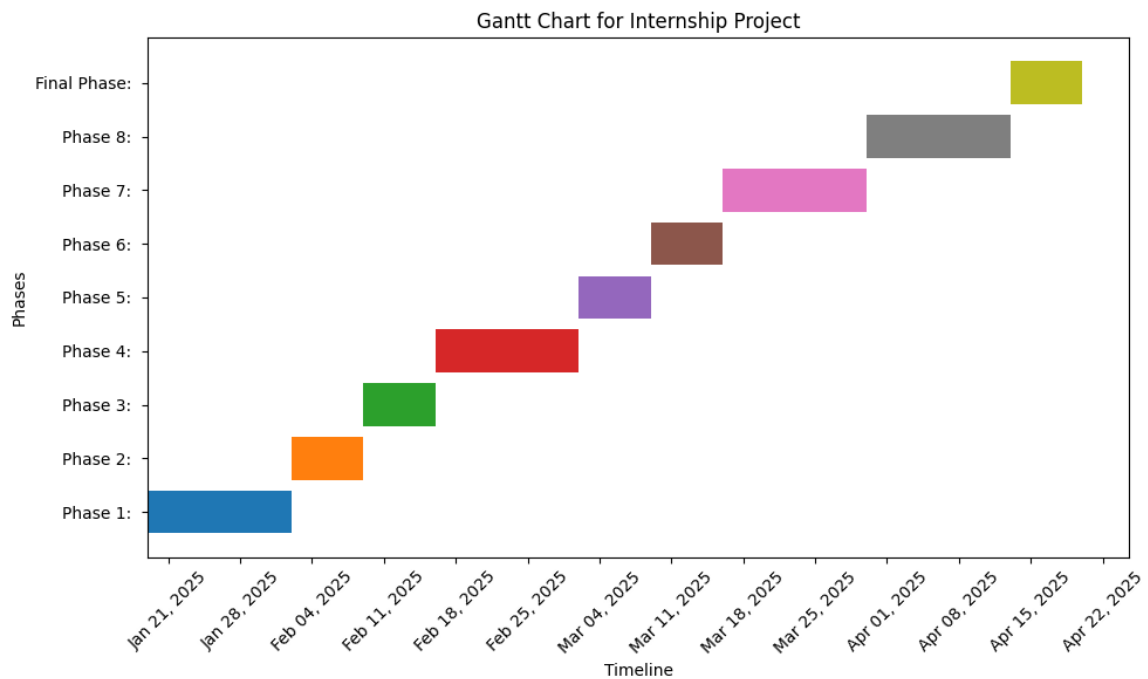


Figure 1 Gantt Chart for internship

Phases Breakdown:

1. Phase 1 (Jan 21 - Jan 28, 2025):

- Initial onboarding and orientation.
- Understanding project objectives and requirements.

2. Phase 2 (Jan 29 - Feb 04, 2025):

- Data collection and exploration.
- Setting up the required tools and technologies.

3. Phase 3 (Feb 05 - Feb 11, 2025):

- Data preprocessing and cleaning.
- Handling missing values and data inconsistencies.

4. Phase 4 (Feb 12 - Feb 18, 2025):

- Feature engineering and selection.
- Enhancing data quality for modeling.

5. Phase 5 (Feb 19 - Feb 25, 2025):

- Implementing machine learning models.
- Training initial models on preprocessed data.

6. Phase 6 (Feb 26 - Mar 04, 2025):

- Model tuning and hyperparameter optimization.
- Evaluating model performance using metrics.

7. Phase 7 (Mar 05 - Mar 11, 2025):

- Data visualization and insights generation.
- Creating reports and dashboards.

8. Phase 8 (Mar 12 - Mar 18, 2025):

- Final model selection and deployment.
- Testing and validation of results.

9. Final Phase (Apr 01 - Apr 20, 2025):

- Documentation and project report preparation.
- Presentation of findings and conclusions.

6. EXPECTED OUTCOMES

- By the end of the internship, the intern will have gained hands-on experience with Python and key libraries (Pandas, NumPy, Matplotlib, Scikit-learn) for data cleaning, analysis, and machine learning.
- They will have developed skills in data preprocessing, model building, and evaluation, while contributing to a real-world data science project. The intern will also improve problem-solving and collaboration skills, receiving mentorship and feedback to prepare for a career in data science.
- The intern will gain practical experience in data science, developing proficiency in Python, data preprocessing, model building, and evaluation while contributing to real-world projects and enhancing problem-solving and collaboration skills.

7. CONCLUSION

- In conclusion, this Data Science Internship provides an excellent opportunity for interns to gain practical experience in data analysis, machine learning, and Python programming. By working on real-world projects, collaborating with experienced professionals, and receiving continuous mentorship, interns will develop valuable skills that will set them up for a successful career in data science.
- The internship aims to empower interns with the technical knowledge and problem-solving abilities needed to excel in the field.