Tribhuvan University

Institute of Science and Technology

Amrit Campus

Computer Vision Internship

At

IT from Himalayas - ITH

Under the Supervision of

Mr. Akkal Bahadur Bist
Department of Computer Science & Information Technology
Amrit Campus, Thamel, Kathmandu

In partial fulfillment of the requirements for the Bachelor of Science in Computer Science and Information Technology (B.Sc. CSIT) of Tribhuvan University

Submitted by:

Mr. Bibek Koirala
Roll No.: 2657 / 2078

Submitted to:

Department of Computer Science & Information Technology
Amrit Campus, Thamel, Kathmandu
Tribhuvan University

March, 2026

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Organization Letter Head

Mentors' Recommendation from Company

This is to certify that [Student's Full Name] (TU Exam Roll No. [XXXXXX]) successfully completed an internship in the field of Computer Science and Information Technology from [Start Date] to [End Date] under proper supervision. The student's performance was satisfactory, and the internship work is recommended for academic evaluation.

.....

Mentor's Name

Designation

Company / Organization Name

Date: .....

Tribhuvan University

Institute of Science and Technology

Amrit Campus

Department of Computer Science & Information Technology

Supervisors' Recommendation Letter

This is to recommend that the internship report entitled "[Internship Title]", prepared by [Student Name] under my supervision, has been completed satisfactorily and is hereby submitted for evaluation. .....

Dr./Asst.Prof./Mr. "Name of Supervisor"
Supervisor
Department of CSIT
Amrit Campus, TU
Date: .....

Tribhuvan University

Institute of Science and Technology

Amrit Campus

Department of Computer Science & Information Technology

Certificate of Approval

This is to certify that the Internship Report entitled **"Internship Title"**, prepared by **[Student Name]** (TU Roll No./Batch: **[TU Roll No./Batch]**), was carried out under the guidance and supervision of **[Supervisor Name]** at **[Organization Name]**. This report represents the candidate's original work and has been completed in partial fulfillment of the requirements for the degree of **Bachelor of Science in Computer Science and Information Technology (B.Sc. CSIT)** at Tribhuvan University.

.....	**.....**
Supervisor Name	**Head/Coordinator Name**
Supervisor	**Head/Coordinator**
Department of CSIT	**Department of CSIT**
Amrit Science Campus	**Amrit Science Campus**

.....

External

Institute of Science & Technology

Tribhuvan University

Acknowledgement

I would like to express my sincere gratitude to my internship supervisor, **[Supervisor Name]**, for their continuous guidance, invaluable suggestions, and encouragement throughout the completion of my internship project, titled **"[Internship Title]"**. Their support has been instrumental in the successful completion of this work.

I am equally thankful to **[Organization Mentor Name]** at **[Organization Name]** for their mentorship, guidance, and constructive feedback during my internship. I also acknowledge the support and assistance of other staff and colleagues at **[Organization Name]** who helped me in various technical and administrative aspects during my training period.

I would like to extend my sincere thanks to the Head/Coordinator of the Department of Computer Science and Information Technology, Amrit Campus, and all the faculty members for their guidance, support, and encouragement. I am also grateful to the administration and staff of Amrit Campus for providing a conducive environment for learning and professional development.

Finally, I am thankful to my friends, family, and all others who directly or indirectly supported me during the internship period and in the preparation of this report. Their encouragement and understanding have been a constant source of motivation.

"Student Name"
"TU Roll No./Batch"
Date: [DD/MM/YYYY]

Abstract

This internship report presents the work carried out by **[Student Name]**, TU Roll No./Batch: **[TU Roll No./Batch]**, during the internship period at **[Organization Name]**. The report focuses on **[Internship Title]** and highlights the application of theoretical knowledge in practical scenarios.

Keywords: Internship, Computer Science, Project Implementation, Practical Experience, Professional Skills

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List of Abbreviations

ALU	Arithmetic Logic Unit
B.Sc. CSIT	Bachelor of Science in Computer Science and Information Technology
CPU	Central Processing Unit
GPU	Graphics Processing Unit
IOST	Institute of Science and Technology
RAM	Random Access Memory

Abbreviation write in alphabetical order.

List of Figures

List of Tables

Chapter 1: Introduction

1.1. Introduction

This chapter provides an overview of the internship project, titled **[Project/Internship Title]**. It introduces the project context, background, and the work performed during the internship. Students should describe the organization, project environment, and any relevant technologies used.

Figure 1.1: Internship goals and targets.

1.2. Problem Statement

This section describes the main problem or challenge that the project addresses. It includes the motivation for the project, why it is important, and what issues exist in the current system or process that the project aims to solve.

1.3. Objectives

The primary objectives of the project are listed below:

1. To ..... objective 1
2. To .... objective 2
3. To .... objectives 3

1.4. Scope and Limitations

This section explains the scope of the project, including what is included and what is not. It also describes the limitations, constraints, and boundaries of the project work.

1.5. Organization of the Report

This section provides a brief outline of the report structure:

- **Chapter 1: Introduction** – Overview, problem statement, objectives, scope, and report structure.
- **Chapter 2: Literature Review** – Review of related works, background theory, and references.
- **Chapter 3: Methodology** – Detailed description of project methods, tools, and implementation.
- **Chapter 4: Implementation and Results** – Presentation of project work, code, outputs, and analysis.
- **Chapter 5: Conclusion and Future Work** – Summary of work, findings, and possible future improvements.

Chapter 2: Organization Details and Literature Review

2.1. Introduction to Organization

The internship was carried out at **[Organization Name]**. The organization has a rich history and operates with a clear mission, vision, and core values. It plays a significant role in the industry and its activities are directly relevant to the internship project. The organization provides an environment conducive to learning practical skills and applying academic knowledge.

2.2. Organizational Hierarchy

The organization has a structured hierarchy consisting of multiple departments and management levels. A hierarchical chart illustrates the reporting relationships and departmental structure. The internship was conducted in the **[Department Name]** department, which plays a key role in the organization's operations.

2.3. Working Domains of Organization

The organization operates in several domains, including software development, network services, and database management. Activities relevant to the internship project were primarily in the areas of **[Specify relevant domains]**.

2.4. Intern Department Details

The internship was performed in the **[Department/Unit Name]**. This department is responsible for **[Department Functions]**. The team includes **[Number/Names of team members]** and employs technologies such as **[Technologies/Processes]**. The workflow and processes relevant to the project are described in the methodology chapter.

2.5. Literature Review

Undergraduate research and internship experiences play a crucial role in enhancing students' academic development, practical skills, and professional identity. Studies have shown that such experiences positively influence students' understanding of research processes, problem-solving

abilities, and career motivation. In particular, the evaluation of undergraduate research internships highlights strong alignment between students' learning outcomes and faculty expectations, emphasizing mentorship as a key factor in successful research engagement (Kardash, 2000).

Modern internships increasingly involve advanced technologies, and students are expected to develop competencies that bridge theoretical knowledge with real-world applications, especially in interdisciplinary and technology-driven domains (Goth et al., 2025).

Recent research trends demonstrate the growing importance of machine learning, data analytics, and artificial intelligence across diverse application areas such as cybersecurity and smart cities. Scientometric analyses reveal a rapid global expansion of machine learning–based cybersecurity research, underscoring its relevance for academic training and industry readiness (Razzaq & Shah, 2025). Similarly, systematic reviews in smart city development highlight the central role of data mining and machine learning in enabling sustainable and intelligent urban systems (Souza et al., 2019). These evolving technological demands expose significant competency gaps between higher education curricula and industry expectations, particularly in AI-related skills. Addressing this mismatch requires curriculum alignment, practical training, and industry-oriented internships, as emphasized by multinational studies on engineering and IT education reform (Alhazmi, 2026).

Chapter 3: Internship Activities

3.1. Roles and Responsibilities

This section describes the specific roles and responsibilities assigned during the internship. It explains the tasks performed, duties in the department/unit, and the expected outcomes of the work.

3.2. Weekly Log

A weekly log of technical activities performed during the internship is presented below. The log includes the date, tasks performed, technologies/tools used, and any outcomes or deliverables.

Table 3.1: Weekly Internship Log

Week	Activities Performed	Technologies/Tools Used
Week 1	[Describe activities]	[Tools used]
Week 2	[Describe activities]	[Tools used]
Week 3	[Describe activities]	[Tools used]

3.3. Project Description

This section provides a detailed description of the project(s) in weekly log basis each week details undertaken during the internship. Include the project title(s), objectives, technologies/tools used, and the purpose of the project(s). Explain how these projects are related to the internship objectives and learning outcomes.

3.4. Tasks and Activities Performed

This section provides a step-by-step explanation of the technical tasks and activities performed during the internship. It may include design, development, testing, implementation, or analysis. Diagrams, screenshots, or sample outputs can be included where necessary to illustrate the work.

Chapter 4: Conclusion and Learning Outcomes

4.1. Conclusion

This section summarizes the overall internship experience and project work. It discusses whether the project objectives were achieved, the challenges faced, and the solutions implemented. Key findings and outcomes of the internship project are highlighted. Recommendations or suggestions for improvement may also be included, if applicable.

4.2. Learning Outcomes

This section describes the skills, knowledge, and competencies gained during the internship. It includes both technical skills (software, tools, methodologies) and soft skills (communication, teamwork, problem-solving). It also reflects on how the internship contributed to professional and academic development.

References

Alhazmi, A. K. (2026). Aligning engineering and it curricula with ai industry needs: A multinational study of competency gaps in higher education. *Innovative teaching methods and learning resources* (pp. 23–41). Springer.

Goth, F., Alves, R., Braun, M., Castro, L. J., Chourdakis, G., Christ, S., Cohen, J., Druskat, S., Erxleben, F., Grad, J.-N., et al. (2025). Foundational competencies and responsibilities of a research software engineer: Current state and suggestions for future directions. *F1000Research*, *13*, 1429.

Kardash, C. M. (2000). Evaluation of undergraduate research experience: Perceptions of undergraduate interns and their faculty mentors. *Journal of educational psychology*, *92*(1), 191.

Razzaq, K., & Shah, M. (2025). Advancing cybersecurity through machine learning: A scientometric analysis of global research trends and influential contributions. *Journal of Cybersecurity and Privacy*, *5*(2), 12.

Souza, J. T. d., Francisco, A. C. d., Piekarski, C. M., & Prado, G. F. d. (2019). Data mining and machine learning to promote smart cities: A systematic review from 2000 to 2018. *Sustainability*, *11*(4), 1077.

Appendix

Appendix A: Sample Code / Scripts

Here, you can include any relevant scripts used during the internship project:

```
import pandas as pd
df = pd.read_csv('data.csv')
df = df.dropna()
print(df.describe())
```

Appendix B: Survey / Questionnaire

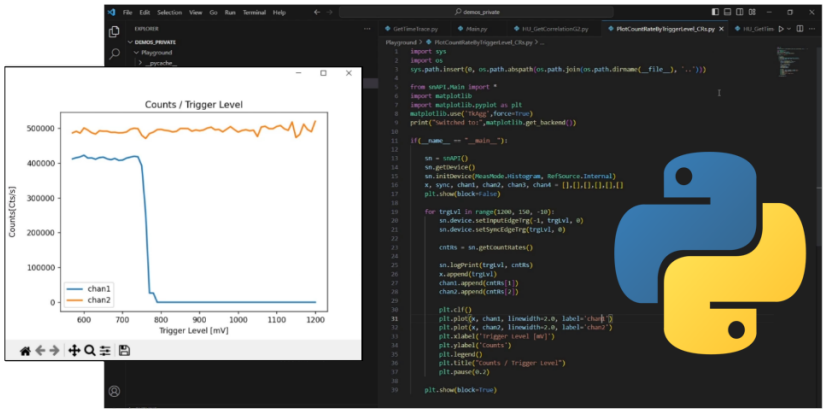

Figure 4.1: Python plot image.

Appendix C: Additional Figures / Tables

Table 4.1: appendix$_{d}ata$

Parameter	Value	Description
X	10	Example parameter
Y	20	Another parameter

Table 4.2: Supplementary data table.

Appendix D: Other Supporting Documents

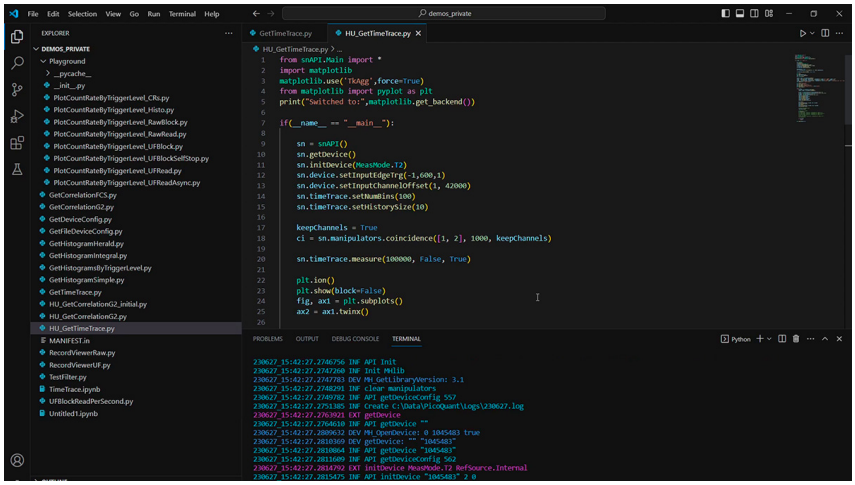

Figure 4.2: VS Code configuration example.