



Indian Institute of  
Technology Bombay



## **FOSSEE SUMMER FELLOWSHIP - 2026**

### **Summer Fellowship Report**

#### **Graphics & Animation (Using Open Source Software) FOCAL project**

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Academic Year: 2026-2027

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ANDHRAPRADESH

Under the guidance of:

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## Acknowledgement

I would like to express my heartfelt gratitude to the Indian Institute of Technology Bombay and the FOSSEE (Free/Libre and Open Source Software for Education) Project for offering me the opportunity to participate in the FOCAL internship. This experience has provided me with valuable exposure to open-source design and animation tools, enabling me to strengthen both my technical knowledge and professional skills.

I extend my sincere appreciation to my mentor, Mr. Kushal Rajput, for his continuous support, valuable guidance, and insightful feedback throughout the internship. His encouragement and expertise motivated me to approach every task with confidence and helped me develop a deeper understanding of the software and concepts involved.

I am also thankful to the entire FOSSEE team at IIT Bombay for conducting well-organized training sessions, providing comprehensive learning resources, and creating a supportive environment that made this internship both engaging and enriching.

I would like to express my gratitude to the Department of Computer Science and Engineering at Sree Narayana Gurukulam College of Engineering for granting me the opportunity to undertake this internship and for their constant encouragement throughout my learning journey.

Finally, I am deeply thankful to my family and friends for their unwavering encouragement, patience, and moral support. Their motivation played a significant role in helping me remain focused and successfully complete this internship.

-Punukollu Sri Haasini

## Table of Contents

|           |                              |
|-----------|------------------------------|
| <b>1</b>  | <b>About FOSSEE,FOCAL</b>    |
| <b>2</b>  | <b>Internship Objectives</b> |
| <b>3</b>  | <b>Week-1</b>                |
| <b>4</b>  | <b>Week-2</b>                |
| <b>5</b>  | <b>Week-3</b>                |
| <b>6</b>  | <b>Week-4</b>                |
| <b>7</b>  | <b>Week-5</b>                |
| <b>8</b>  | <b>Week-6</b>                |
| <b>9</b>  | <b>Week-7</b>                |
| <b>10</b> | <b>Week-8</b>                |
| <b>11</b> | <b>Outcome</b>               |
| <b>12</b> | <b>Feedback</b>              |
| <b>13</b> | <b>Declaration</b>           |
| <b>14</b> | <b>Appendix</b>              |

## **About FOSSEE**

FOSSEE (Free/Libre and Open Source Software for Education) is a flagship project based at the Indian Institute of Technology Bombay (IIT Bombay). Funded by the Ministry of Education, Government of India, under the National Mission on Education through Information and Communication Technology (NMEICT), its primary mandate is to promote the adoption of free and open-source software (FOSS) across academic institutions nationwide. By providing viable open-source alternatives, FOSSEE aims to eliminate reliance on commercial, proprietary software, thereby democratizing access to quality technical education. The project achieves this through a multipronged approach, including textbook companions, spoken tutorials, virtual laboratories, and rigorous internship programs. Through the promotion of robust tools like Scilab, OpenFOAM, Python, and various open source creative suites, FOSSEE continues to fundamentally transform technical pedagogy and practice in India.

## **About FOCAL**

FOCAL is a premier, structured internship initiative under the FOSSEE project, designed to provide students with intensive, project-based exposure to open-source workflows. Moving beyond the scope of traditional workshops, FOCAL internships simulate real-world development environments by integrating dedicated mentorship, structured weekly milestones, and rigorous peer-review feedback loops. This report details a comprehensive two-month internship within the Graphic Design and Animation track of the FOCAL program. The curriculum was divided into two distinct phases:

- Weeks 1–5 (Technical Foundations): A progressive deep-dive into the open source creative pipeline, spanning 2D vector design, image manipulation, digital publishing, and keyframe animation. The curriculum was systematically structured so that core skills—such as path editing in Inkscape—served as building blocks for advanced animation workflows in Synfig Studio and 3D modeling environments like Blender. [4]
- Weeks 6–8 (Advanced Projects & Leadership): A high-impact phase dedicated to executing an independent design capstone, contributing production assets to an official FOSSEE outreach campaign, and culminating in a leadership module where I designed and delivered technical workshops for undergraduate peers.

## Internship Objectives

The primary objective of this internship was to gain practical knowledge and hands-on experience in Graphic Designing and Animation using Free and Open Source Software under the FOSSEE Project at the Indian Institute of Technology Bombay. The internship aimed to bridge the gap between academic learning and industry-oriented practice by providing structured training in professional open-source design and animation tools.

A key objective was to develop technical proficiency in software such as Inkscape, GIMP, Scribus, Synfig Studio, and Blender through mentor-guided sessions, practical assignments, and project-based learning. The internship also focused on strengthening creativity, visual communication, and problem-solving skills by encouraging the design of original graphics, image editing projects, publication layouts, 2D animations, and 3D models.

Another important objective was to understand the complete workflow involved in creating digital design and animation projects, from concept development and planning to execution, review, and final presentation. Through regular mentor feedback and continuous improvement, the internship encouraged quality-focused work, attention to detail, and the ability to apply constructive suggestions effectively.

The programme further aimed to enhance essential professional skills such as time management, communication, teamwork, self-learning, and adaptability while working in a structured project environment. The later stages of the internship provided opportunities to apply acquired knowledge through an independent project, contribute to a FOSSEE introductory video, and conduct workshops for college students, thereby developing leadership and presentation abilities.

Overall, the objective of the internship was to equip participants with industry-relevant technical skills, practical experience with open-source software, and professional competencies that support future academic projects, creative work, and career opportunities in graphic design, animation, multimedia, and related fields.

# WEEK 1

In Week 1, we learned about the open source Vector Graphics tool  
“INKSCAPE”.

<https://drive.google.com/drive/folders/14BkxNRf7LpwNK5lsV4Otcyq2XPe2F6sv?usp=sharing>

DESKTOP



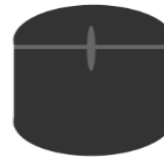
CPU



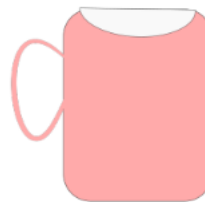
KEYBOARD



MOUSE



BOTTLE



JAR

## WEEK 2

### Image Editing using GIMP

During the second week, the focus shifted from vector graphics to image editing. The sessions introduced the basic workflow of editing raster images using various tools and techniques. The week started with an overview of the workspace, where different panels, menus, and editing tools were explained. After understanding the interface, we explored how to work with images by performing basic editing operations.

The practical sessions covered tools such as selection, crop, resize, rotate, flip, scale, brush, eraser, and text. We also learned how to adjust image colours using brightness, contrast, hue, saturation, and levels to improve image quality. One of the important concepts covered during the week was the use of layers. Different layer operations such as creating, duplicating, arranging, hiding, and adjusting opacity were demonstrated, helping us understand how complex image editing projects are managed without affecting the original image.

Further sessions included object selection, background removal, cloning unwanted portions of an image, and applying transformations to create clean and visually appealing designs. The demonstrations emphasized maintaining image quality while editing and using multiple tools together to achieve the desired output. Throughout the week, we became familiar with the complete image editing workflow, from importing an image to making modifications and exporting it in different formats.

By the end of the week, I gained a better understanding of image editing techniques and the importance of layers, colour correction, and selection tools in producing professional-quality digital graphics.

## **WEEK 3**

### Desktop Publishing using Scribus

The third week focused on desktop publishing and document layout design. The sessions introduced the process of creating structured documents by combining text, images, and graphical elements into a well-organized layout. The week began with learning how to create a new document by selecting the appropriate page size, margins, guides, and columns based on the requirements of the publication.

The practical sessions mainly involved working with text frames and image frames. We learned how to insert and format text, adjust fonts, paragraph spacing, alignment, and create consistent layouts using styles. Images were imported into image frames, resized, positioned, and aligned with other page elements to create balanced page designs. Different alignment and distribution tools were used to maintain uniform spacing throughout the document.

As the sessions progressed, we explored page management features such as adding multiple pages, using master pages, and organizing content efficiently. We also learned how typography, spacing, margins, and visual hierarchy contribute to improving the readability and appearance of a publication. The demonstrations highlighted the importance of planning the layout before arranging content, making the overall design more structured and professional.

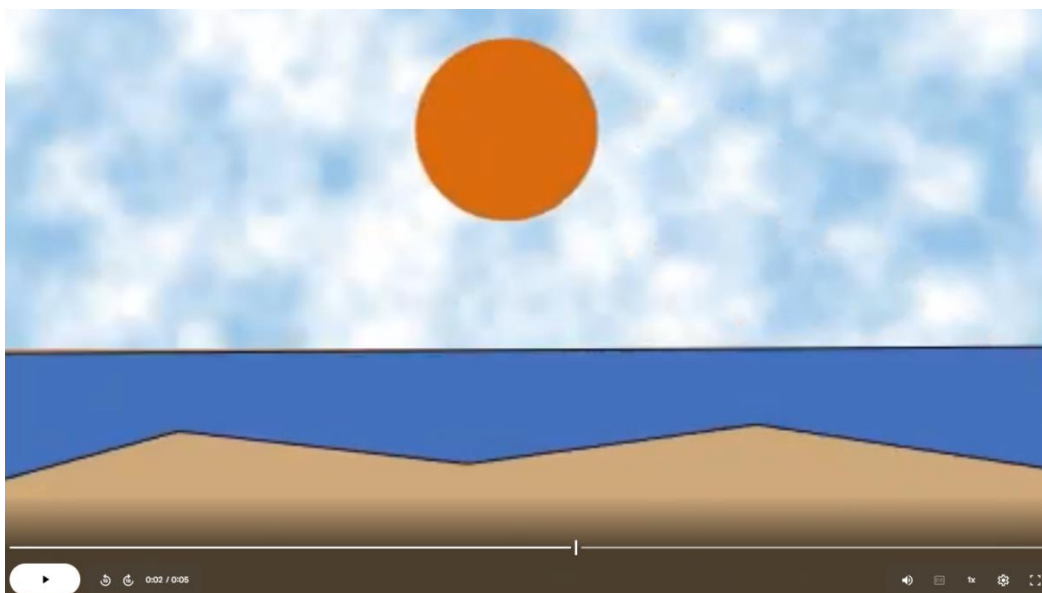
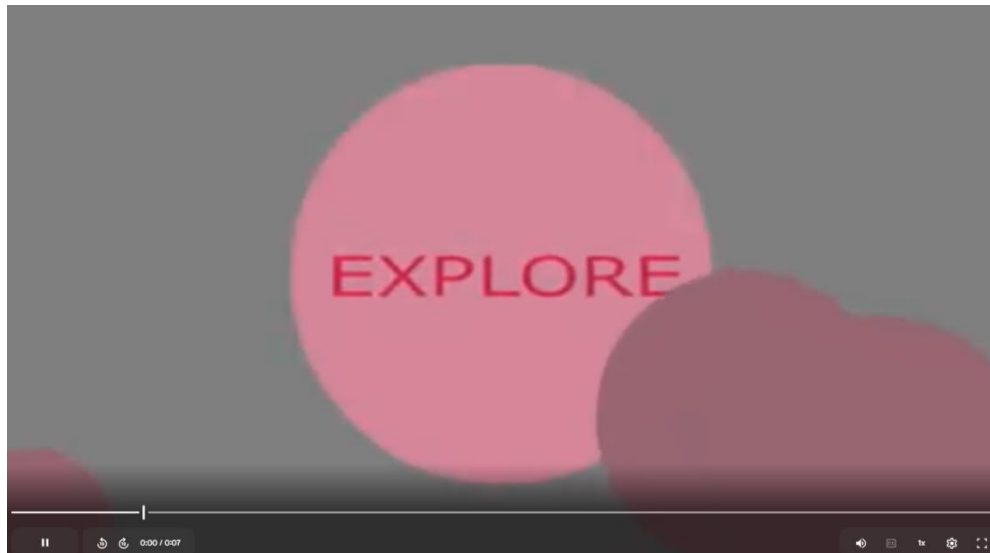
By the end of the week, I understood the complete workflow involved in designing brochures, reports, and other publication materials. The sessions improved my understanding of page layout principles, content organization, and document formatting, providing valuable knowledge for creating professional publications.



## WEEK 4

In Week 4, we learned about the open source 2D animation tool “SYNFIG STUDIO”.

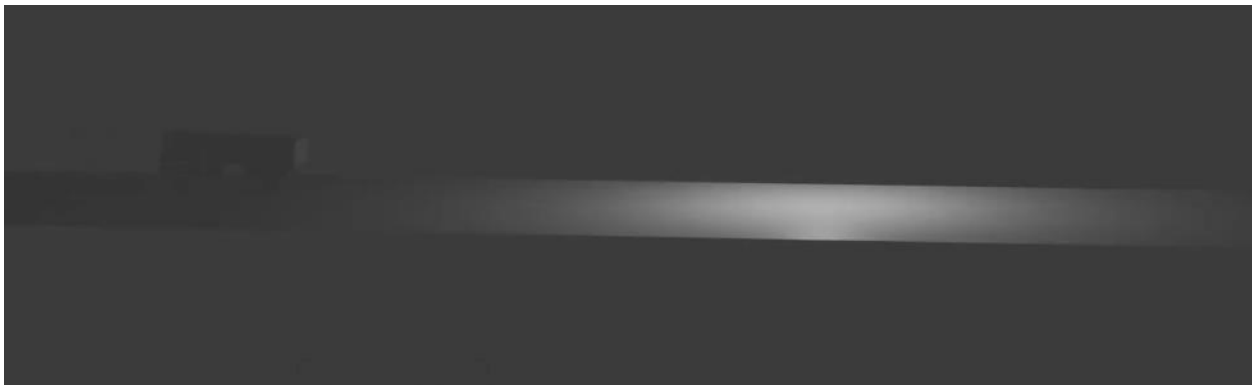
<https://drive.google.com/drive/folders/195uagFnZ-r5-rV2EEr4kIG05IBVNOBf5?usp=sharing>



## WEEK 5

In Week 5, we learned about the open source 3D model and animation tool “BLENDER”.

[https://drive.google.com/drive/folders/1DUEhvua038Yop4vcd0LzWk12K77k07YK?usp=s\\_haring](https://drive.google.com/drive/folders/1DUEhvua038Yop4vcd0LzWk12K77k07YK?usp=s_haring)



## WEEK 6

In Week 6, we made a few projects which were related to the opensource tool which we learnt in the previous weeks.

<https://drive.google.com/drive/folders/1P9ilpMoXgAC8KSpP3avZMTRvDNgtuC?usp=sharing>



# PYTHON HACKATHON

  
**Code**

  
**Build**

  
**Innovate**

**DATE : 31/08/2027**

**TIME : 9:30 AM TO 5:30 PM**

**LOCATION : IIT BOMBAY**

**REGISTER NOW**



# **PYTHON HACKATHON**

**CODE • BUILD • INNOVATE**

**REGISTER NOW**

**DATE : 20/09/2027**

**TIME : 9:30 ONWARDS**

**VENUE : VIJAYAWADA,PVP MALL**

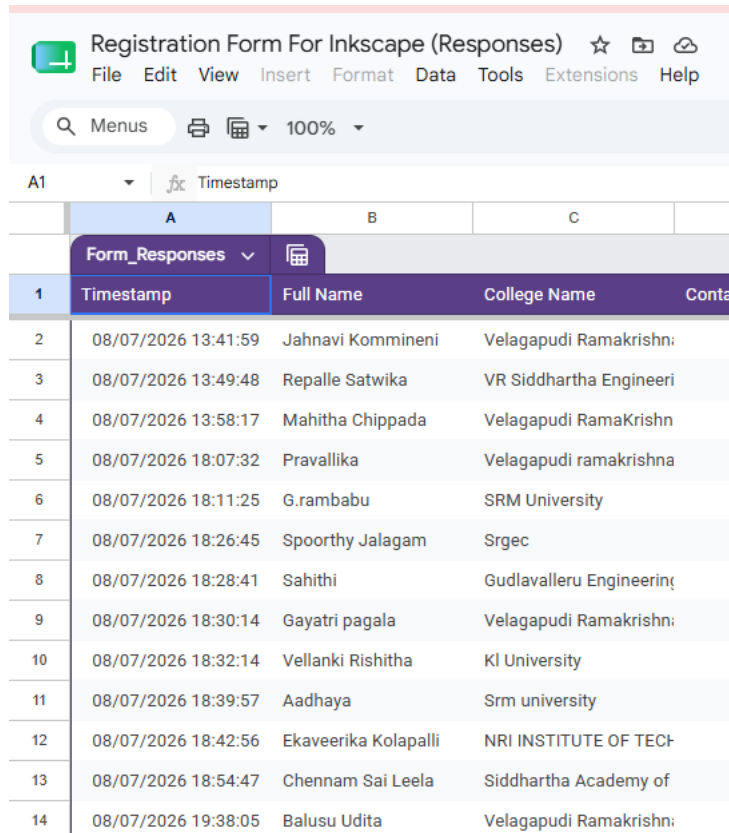
## WEEK 7

In Week 7, we made a few projects which were related to the open source tool which we learnt in the previous weeks ( Synfig studio and Blender).

<https://drive.google.com/drive/folders/145Kt70PAkM4VhpxNKAiJr6GplqGIFy95?usp=sharing>



## WEEK 8



The screenshot shows the Inkscape application window titled "Registration Form For Inkscape (Responses)". The interface includes a menu bar (File, Edit, View, Insert, Format, Data, Tools, Extensions, Help), a search bar, and a toolbar. A spreadsheet is open, displaying a table of registration data. The table has columns for Timestamp, Full Name, College Name, and Contact. The data is organized into rows, with the first row being a header and subsequent rows containing individual participant information.

|    | A                   | B                    | C                           |         |
|----|---------------------|----------------------|-----------------------------|---------|
|    | Form_Responses      |                      |                             |         |
| 1  | Timestamp           | Full Name            | College Name                | Contact |
| 2  | 08/07/2026 13:41:59 | Jahnvi Kommineni     | Velagapudi Ramakrishna      |         |
| 3  | 08/07/2026 13:49:48 | Repalle Satwika      | VR Siddhartha Engineering   |         |
| 4  | 08/07/2026 13:58:17 | Mahitha Chippada     | Velagapudi RamaKrishna      |         |
| 5  | 08/07/2026 18:07:32 | Pravallika           | Velagapudi ramakrishna      |         |
| 6  | 08/07/2026 18:11:25 | G.rambabu            | SRM University              |         |
| 7  | 08/07/2026 18:26:45 | Spoorthy Jalagam     | Srgec                       |         |
| 8  | 08/07/2026 18:28:41 | Sahithi              | Gudlavalleru Engineering    |         |
| 9  | 08/07/2026 18:30:14 | Gayatri pagala       | Velagapudi Ramakrishna      |         |
| 10 | 08/07/2026 18:32:14 | Vellanki Rishitha    | KI University               |         |
| 11 | 08/07/2026 18:39:57 | Aadhaya              | Srm university              |         |
| 12 | 08/07/2026 18:42:56 | Ekaveerika Kolapalli | NRI INSTITUTE OF TECHNOLOGY |         |
| 13 | 08/07/2026 18:54:47 | Chennam Sai Leela    | Siddhartha Academy of       |         |
| 14 | 08/07/2026 19:38:05 | Balusu Udit          | Velagapudi Ramakrishna      |         |

During Week 8, I conducted an Inkscape workshop for the registered participants. The session focused on introducing the fundamentals of Inkscape, including its interface, essential tools, and best practices for creating vector graphics. I demonstrated various features such as drawing shapes, using the Pen and Bezier tools, applying colors and gradients, working with layers, and editing paths.

Throughout the workshop, I guided participants through hands-on exercises, allowing them to practice the concepts in real time. I addressed participants' questions, clarified their doubts, and provided practical tips to improve their workflow and design quality. The workshop aimed to build confidence in using Inkscape for graphic design tasks and encourage participants to explore open-source software for creative projects.

The session concluded with a summary of the key concepts covered, along with recommendations for additional practice and learning resources. Overall, the workshop was interactive, informative, and well-received by the participants.

## Learning Outcomes

The FOSSEE internship under the FOCAL initiative provided me with valuable hands-on experience in graphic designing, vector illustration, animation, and basic 3D modelling using open-source software such as Inkscape, Synfig Studio, and Blender. Through structured training sessions and practical assignments, I developed proficiency in creating vector graphics, designing illustrations, producing 2D animations, and building basic 3D models, while gaining a comprehensive understanding of the creative design workflow.

The project-based learning approach encouraged self-learning, creativity, and problem-solving. Completing a variety of assignments helped me strengthen my technical skills, while regular feedback from my mentor enabled me to refine my work and improve the quality of my designs and animations.

In addition to technical expertise, the internship enhanced my professional skills, including communication, time management, organization, teamwork, and adaptability. Successfully contributing to the FOSSEE introductory video and conducting an Inkscape workshop for registered participants improved my presentation, leadership, and mentoring abilities while boosting my confidence in sharing technical knowledge with others.

The internship also increased my awareness of the significance of Free and Open Source Software (FOSS) in providing accessible, cost-effective, and community-driven solutions for design and creative applications. Overall, this experience strengthened both my technical and interpersonal skills, broadened my understanding of open-source technologies, and provided a strong foundation for future academic projects and career opportunities in graphic design, animation, multimedia, and UI/UX design.

## Feedback

The FOSSEE–FOCAL Graphic Designing and Animation Internship at IIT Bombay was a highly enriching and rewarding learning experience. The internship was well-structured, combining mentor-led training, practical assignments, and continuous feedback that helped me strengthen both my technical knowledge and creative abilities.

The guidance and support provided by my mentor played a significant role in my learning journey. The constructive feedback received on each assignment motivated me to improve my work, enhance the quality of my designs and animations, and develop a systematic approach to problem-solving. The hands-on assignments provided valuable experience with open-source tools such as Inkscape, Synfig Studio, and Blender, helping me understand practical design and animation workflows.

In addition to completing software-based assignments, contributing to the FOSSEE introductory video and conducting an Inkscape workshop for registered participants enhanced my communication, presentation, leadership, and mentoring skills. These opportunities allowed me to share my knowledge with others while improving my confidence in applying technical concepts in real-world scenarios.

I sincerely appreciate the continuous support, guidance, and encouragement provided by my mentor and the entire FOSSEE team throughout the internship. The well-planned training sessions, organized learning resources, and collaborative environment made the internship both productive and enjoyable. Overall, this experience has strengthened my technical expertise, improved my professional skills, and inspired me to continue exploring open-source technologies for future academic projects and career opportunities.



## **Declaration**

I hereby declare that this internship report entitled "Graphic Designing and Animation Internship under the FOSSEE–FOCAL Initiative, IIT Bombay" is a true and authentic record of the work carried out by me during the internship under the guidance of my mentor. The work presented in this report is original and has not been submitted, either in whole or in part, for the award of any degree, diploma, certificate, or any other academic qualification.

I further declare that all the information, observations, and outcomes presented in this report are true to the best of my knowledge and belief. Wherever the work or ideas of others have been referred to, appropriate acknowledgment has been duly provided.

Place: Vijayawada

Date: 23/07/2026

Punukollu Sri Haasini

## **Appendix**

The appendix contains supporting materials related to the internship that provide additional evidence of the work completed during the FOSSEE–FOCAL Graphic Designing and Animation Internship.

### **Google Drive Folder:**

[https://drive.google.com/drive/folders/1TtCdTqj9yQI-A\\_-jwO3wsWI-al1HhAGI?usp=sharing](https://drive.google.com/drive/folders/1TtCdTqj9yQI-A_-jwO3wsWI-al1HhAGI?usp=sharing)

**Appendix A:** Weekly Assignment Sheets

**Appendix B:** Assignment Submission Files