



RV Educational Institutions

## **RV Institute of Technology and Management®**

### **Department of Computer Science and Engineering**

<b>Event Name</b>	<b>Internship certificate distribution for RVITM industry connect project - VIVEKA</b>
<b>Date</b>	4 <sup>th</sup> January 2024
<b>Venue</b>	Seminar hall, RVITM
<b>Audience</b>	Members of Light of SELF Foundation, VII semester CSE students and Faculties of Dept. of CSE

#### **Objective of the Program:**

The academia with industry together brings out a revolutionary change in every student life in terms of project-based learning and skill development opportunities. Nevertheless, academia has ability to develop and contribute to an innovative solution for the industry. The association of industry and academia develops a self-sustained ecosystem leading to the concept of industry on campus.

To strengthen the industry-institute relation, RVITM has established industry connect program with Light of the Self Foundation, Bengaluru with project name “VIVEKA”. In this program, new technologies of deep learning, natural language processing, multi-lingual and multi modal translations and artificial intelligence are adopted to bring the innovative solutions to the industry by involving students of RVITM. After the successful completion of the project Viveka phase-1, along with project guide Dr Roopashree S, 38 students from 7<sup>th</sup> semester Dept. of CSE were awarded with internship certificates. The event was presided by Dr Jayapal R, Principal, RVITM, Dr Malini M Patil, Professor & Head, Dept. of CSE, Shri Narasimha Prabhu, Founder, Light of Self Foundation, Bengaluru.

#### **Topics Covered:**

- Discussion on the journey of implementation of this project from its inception i.e. 25<sup>th</sup> January 2023.
- Feedback of interns on how they could solve their problem statement and their hurdles.
- The team leads of the project were Ms. Palvisha Changkakati, Ms. Mahalakshmi, Mr

Samyak Tantradi, Mr. Aashish Ramana S and Mr Pranesh B were felicitated exclusively

- The Principal, HoD of CSE, Project guide Dr Roopashree S, and Mr Shashidhar Jakkali were honoured during the event.

### **Brief Report:**

The Project Viveka, a collaborative effort involving 7th semester CSE interns, has reached its successful conclusion on its phase-1 requirements. On January 4, 2024, the team from the NGO Light of the SELF Foundation, headed by founder Shri Narasimha Prabhu, visited to mark the occasion. A total of 38 interns received internship certificates and mementoes in recognition of their contributions. The team leads of the project were Ms. Palvisha Changkakati, Ms. Mahalakshmi, Mr Samyak Tantradi, Mr. Aashish Ramana S and Mr Pranesh B. Additionally, key figures including the Principal, HoD of CSE, Project guide Dr Roopashree S, and Mr. Shashidhar Jakkali were honoured during the event.

This project work introduces a comprehensive solution as platform to overcome traditional translation system limitations. Using Natural Language Processing (NLP) advanced techniques such as Large Language Model (LLMs) like IndicTrans and IndicXlit from AI4Bharat, coupled with open-source AI model, it facilitates smooth translation across multiple Indian languages (Hindi, Bengali, Marathi, Gujarati, Kannada, Tamil, Telugu, Malayalam) and international languages (French, Russian, German, Portuguese, Spanish, Italian, Dutch). The system extends to audio and engaging subtitled avatar videos, accommodating various content formats (images, DOCX, PDF, YouTube links) for enhanced accessibility. The module for input data curation enhances the LLaMA 2 model by META, ensuring high-quality grammar and spelling in outputs. LinguaLuxe represents a significant leap in language translation, bridging barriers and promoting inclusivity in the digital world.

The software developed as part of the project will support multiple input and output formats, including pdf, docx, mp3, and mp4, with capabilities for data extraction, curation, and customization of user output. Lastly, the project emphasizes the importance of gathering user feedback through surveys, interviews, and focus groups to enhance the model's utility and effectiveness across diverse cultural backgrounds and technical proficiencies. The outcomes of the project hold significant applicability across various domains, including Language Translation Services, where accurate and nuanced translations are essential for individuals, businesses, and organizations dealing with multiple languages. Educational platforms stand to benefit from enhanced language learning experiences, incorporating clear audio, synchronized subtitles, and engaging video avatars.



A group picture with all interns, Light of SELF Foundation members, Principal, RVITM and HoD, Dept.of CSE, RVITM



A group picture with all interns, Light of SELF Foundation members, Principal, RVITM and HoD, Dept.of CSE, RVITM





A collage of felicitating the team leads, Dr Roopashree S, Project Guide, Dr Jayapal R Principal, RVITM and Dr Malini M Patil, HoD, Dept.of CSE, RVITM

**Coordinator Signature**  
**Dr Roopashree S**  
 Assistant Professor  
 Dept. of CSE  
 RVITM

**HOD's Signature**