

## THE UNIVERSITY OF AIZU

Tsuruga, Ikki-machi, Aizu-Wakamatsu City Fukushima, 965-8580 Japan phone 0242-37-2500 fax 0242-37-2528

Date: 31-March-2024

Dear Mr. Marrimanu Charan Teja,

Subject: Internship Completion Certification

We are pleased to certify that Mr. Marrimanu Charan Teja, bearing passport number Y5875334, has successfully completed an internship at The University of Aizu from January 1, 2024, to March 31, 2024.

During his tenure as a student intern, Mr. Charan Teja made significant contributions. First, he developed a fast and energy-efficient multi-task learning machine learning model to predict traffic congestion in large-scale transportation networks. Second, he played a crucial role in documenting the PAMI (pattern mining) library, a task that greatly aided our ongoing projects.

Mr. Charan Teja has showcased commendable dedication, intellectual curiosity, and technical proficiency. We have highly appreciated his proactive approach and ability to work individually and collaboratively with our team.

We are confident that Mr. Charan Teja's experience and skills developed during this internship will be instrumental in his professional growth. The knowledge he acquired and the practical skills he honed will undoubtedly serve him well in his future academic and professional endeavors.

Mr. Charan Teja, we are grateful for your dedication and hard work during your internship. We are confident that you will continue to excel in your future pursuits. Please accept our best wishes for your academic and professional journey ahead.

Sincerely,

Dr. RAGE Uday Kiran

Associate Professor The University of Aizu

Aizu-Wakamatsu, Fukushima, Japan



## THE UNIVERSITY OF AIZU

Tsuruga, Ikki-machi, Aizu-Wakamatsu City Fukushima, 965-8580 Japan phone 0242-37-2500 fax 0242-37-2528

Date: 31-March-2024

Dear Mr. YERRAGOLLA, HAREESH KUMAR,

Subject: Internship Completion Certification

We are pleased to certify that Mr. Yerragolla Hareesh kumar, bearing passport number W8157062, has successfully completed an internship at The University of Aizu from January 1, 2024, to March 31, 2024.

During his tenure as a student intern, Mr. Hareesh kumar made significant contributions. First, he developed a fast and energy-efficient Deep learning model to predict air pollution in the big data produced by the thousands of sensors located throughout Japan. Second, he played a vital role in documenting the PAMI (pattern mining) library, a task that greatly aided our ongoing projects.

Mr. Hareesh kumar has showcased commendable dedication, intellectual curiosity, and technical proficiency. We have highly appreciated his proactive approach and ability to work individually and collaboratively with our team.

We are confident that Mr. Hareesh kumar 's experience and skills developed during this internship will be instrumental in his professional growth. The knowledge he acquired and the practical skills he honed will undoubtedly serve him well in his future academic and professional endeavors.

Mr. Hareesh kumar, we are grateful for your dedication and hard work during your internship. We are confident that you will continue to excel in your future pursuits. Please accept our best wishes for your academic and professional journey ahead.

Sincerely,

Dr. RAGE Uday Kiran Associate Professor

The University of Aizu

Aizu-Wakamatsu, Fukushima, Japan



Ta	whom	if	may	conce	arn
	AALIOIII	"	IIIay	COLICE	71 I I

Yverdon-les-Bains, 2024-07-19

This is to certify that **Mr. Nitish Sine**, an undergraduate student of the Department of Computer Science and Engineering at the Madanapalle Institute of Technology and Science, has successfully completed his 6 Months Internship during 20 December 2023 – 20 May 2024 at the REDS Institute, HEIG-VD, part of the University of Applied Sciences HES-SO in Yverdon-Les-Bains, Switzerland. He worked on a project titled "Sentiment Analysis of Music using MFCC Features and RNN" under the supervision of Prof. Cédric Bornand.

Mr. Nitish Sine has shown dedication and involvement in his work. He actively engaged in the project, contributing to the development of an RNN model that analyzes the emotional content of music using Mel Frequency Cepstral Coefficients (MFCC).

I found him to be enthusiastic and meticulous in all tasks he undertook. I wish him all the best in his future endeavors.

With my best regards,

Prof. Cédric Bornand

**REDS Institute** 

Tél. +41 (0)24 557 63 30 Fax +41 (0)24 557 64 04 E-mail: info@heig-vd.ch





To whom	it n	nav	con	cern
1 0 11110111		iuy		CCII

Yverdon-les-Bains, 2024-07-19

This is to certify that **Mr. Venkata Puneeth Chowdary Gangarapu**, an undergraduate student of the Department of Computer Science and Engineering at the Madanapalle Institute of Technology and Science, has successfully completed his 6 Months Internship during 20 December 2023 – 20 May 2024 at the REDS Institute, HEIG-VD, part of the University of Applied Sciences HES-SO in Yverdon-Les-Bains, Switzerland. He worked on a project titled "Sentiment Analysis of Music using MFCC Features and RNN" under the supervision of Prof. Cédric Bornand.

Mr. Puneeth Gangarapu has shown dedication and involvement in his work. He actively engaged in the project, contributing to the development of an RNN model that analyzes the emotional content of music using Mel Frequency Cepstral Coefficients (MFCC).

I found him to be enthusiastic and meticulous in all tasks he undertook. I wish him all the best in his future endeavors.

With my best regards,

Prof. Cédric Bornand

**REDS Institute** 

Tél. +41 (0)24 557 63 30 Fax +41 (0)24 557 64 04 E-mail: info@heig-vd.ch

