

VIETNAM NATIONAL UNIVERSITY, HO CHI MINH CITY
UNIVERSITY OF SCIENCE
FACULTY OF INFORMATION TECHNOLOGY



Final Project
PLAN AND WORK DISTRIBUTION

Course: CSC14120 – Parallel programming

Presented by: Group 6

22127008 - Đăng Châu Anh

22127170 - Trần Dịu Huyền

22127359 - Chu Thúy Quỳnh

Lecturer:

Lec. Phạm Trọng Nghĩa

Lec. Lê Nhựt Nam

Lec. Nguyễn Tiến Huy

Ho Chi Minh City, 20th November 2025

Student ID	Member	Contribution
22127008	Đặng Châu Anh	33.33%
22127170	Trần Dịu Huyền	33.33%
22127359	Chu Thúy Quỳnh	33.33%

Start	End	Task	Owner	Completion Level
24/11/2025	30/11/2025	- Problem Statement, CIFAR-10 overview, Autoencoder architecture.	Chu Thúy Quỳnh	100%
		- Implement Conv2D, ReLU, MaxPool, Upsample, MSE Loss. - Weight init, forward/backward pass, save/load weights.	Trần Dịu Huyền	100%
		- Implement Dataset class, binary parsing, normalization, batching. - Train CPU baseline (20 epochs), record time & loss.	Đặng Châu Anh	100%
01/12/2025	7/12/2025	- GPU Memory Management. - Implement: Conv, ReLU, MaxPool, Upsample, MSE Loss.	Chu Thúy Quỳnh	100%
		- Complete full forward pass on GPU. - Implement gradient kernels + SGD update.	Đặng Châu Anh	100%
		- Set up loss/time logging for GPU. - Write report phase 1.	Trần Dịu Huyền	100%
8/12/2025	14/12/2025	- Apply 2–3 optimizations, choose best method.	Đặng Châu Anh Trần Dịu Huyền	100%
		- Extract latent vectors, train SVM, compute accuracy. - Write report phase 2.	Chu Thúy Quỳnh	100%
15/12/2025	17/12/2025	- Comprehensive Performance Analysis. - Write report phase 3.	Đặng Châu Anh	100%
		- Lessons Learned and Challenges Overcome. - Write report phase 4.	Chu Thúy Quỳnh	100%
		- Conclusion and Future Work. - Write README.md	Trần Dịu Huyền	100%
18/12/2025	20/12/2025	- Combine all modules, format file. - Video.	All members	100%