

SECTION C

Weekly Journal

Instruction to Student:

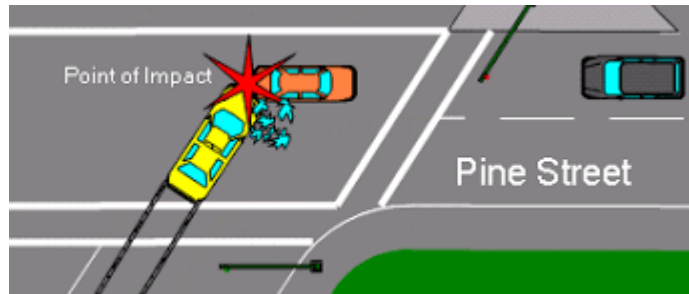
1. On a daily basis, record the specific task that you carried out for that day.
2. At the end of every week, describe one task in more details with diagrams or photos attached.

Week : 4 Date from: 1/4/2024 to 5/4/2024

Department/Section Attached: Assembly Metrology

Day	Tasks Record
Monday	<ul style="list-style-type: none"> • Attended Global Micron Launch at FAB10X for new hires. • Learnt the more about Micron's Successes and the company's vision for the next 5 years.
Tuesday	<ul style="list-style-type: none"> • Attended the first day of AT New Hire Boot Camp • Learnt overview of other processes within the Assembly and Test Line • Created a newer dense and layered model to combat the low categorical accuracy. <ul style="list-style-type: none"> ○ Had low accuracy and high loss. ○ Model Training took to long due to large dataset and high number of layers. • Overfitting does not seem to be the main issue instead incorrect category placement is the main issues.
Wednesday	<ul style="list-style-type: none"> • Day 2 of AT New Hire Boot Camp • Global ESD Awareness retraining • Model V5 is a failure, due to low accuracy, and high loss. • ModelV4 was retrained with larger dataset but had lower accuracy and higher loss due to lack of completed training. • Did Daily User Validation for ADC, picked out under/over killing, defects and possible patterns
Thursday	<ul style="list-style-type: none"> • Day 3 of AT New Hire Boot Camp • Conducted Training for ModelV4 • All Models seems to have failed in image classification, achieving low categorical accuracy <10% • Binary Classification could be used but would be useless as there are ongoing systems doing so. • Did Daily User Validation for ADC • Learnt Problem Solving skills and Engineering Mindsets • Started learning object detection and binary classification
Friday	<ul style="list-style-type: none"> • Day 4 of AT New Hire Boot Camp. • Conducted Training for new ModelV6 and ModelV7 to try to solve categorical accuracy. • Did Daily User Validation for ADC, noticed possible points of failure.

Describe one task in more details with diagrams or photos attached.
Explain the importance/relevance of this task to the company.



Micron is a leading manufacturer of DRAM and NAND, a crucial component in the HBM3E, an AI innovation for processing. Some of Micron's customers include autonomous automotive, and data centers. Thus, the standards and quality of Micron's products must be significantly higher than minimum requirements to protect lives relying on our technology. In the event of a memory failure in an autonomous car, the AI computing may not be able to detect, process and avoid possible hazards on the road which could lead to accidents, hence quick problem solving is required to minimize risk. This was what was taught.

- The first step after identifying a problem is to take emergency action to mitigate the risks, this is to ensure the issue stops creating harm to the user.
- Afterwards, a special taskforce must be put in place to solve the issue. By collecting information, and data analysis the team will find out the reason for failure. Once the root cause is identified, containment measure can be implemented.
- Next, the team will investigate further, using diagrams such as the fishbone diagram, fail model validation, and 5Why. The team will be able to understand the potential causes of failure, causes with the highest possibility and identify root causes – its occurrence and how to detect them.
- From there, the team will generate solutions to tackle the root causes to find the most efficient and most viable solution. The solution can then be implemented after proper validation. If proven effective, the solution can be extended to other machinery or sites to ensure similar issues can be prevented before they occur.
- Proper feedback will then be consistently given to improve the solution.

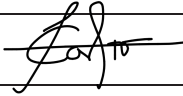
After learning the flow of problem solving, I will be able to apply them towards my project to figure out issues that may arise and apply my learning to quickly rectify the issue.

Assessment on Student

Grading Scheme :

A (Excellent)	-	Consistently exhibit qualities beyond expectation and norms.
B+ (Very Good)	-	Exhibit qualities above expectation and the norms.
B (Good)	-	Exhibit qualities which are considered necessary to produce good quality work.
C+ (Good Credit)	-	Exhibit good qualities which are the norm.
C (Credit)	-	Exhibit acceptable qualities which are the norm.
D (Pass)	-	Exhibit qualities which varies between the norm and unacceptable standard.
F (Fail)	-	Exhibit qualities which are not acceptable and are hindrances to operations.

Conduct:	Average	Attendance: Average	* Regular / Average / Poor
Performance :	Satisfactory	Punctuality: Satisfactory	* Satisfactory / Unsatisfactory
Remarks :			

Name of Supervisor :	Francis Castro <small>Click here to enter text.</small>	Signature :	
*Delete whichever is not applicable		Date :	