# STATUS REPORT

# CS 573: Computer Vision and Image Processing

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## Project Team Information

Project Title: Disparity for Stereo Vision – Block Matching and Dynamic Programming
Project Partners:

| Name | UB Person | UBIT Name |
|---|---|---|
| Arun Sharma | 50206920 | arunshar |
| Jayaraj Channabasav Sajjanar | 50208475 | jayarajc |

## Summary

In this project, we are implementing two techniques as per the requirement for finding the disparity map, one through basic block matching and other with Dynamic Programming. Disparity map gives us an intuition of depth. After getting disparity maps we compare it with the given ground truth images by calculating their mean square error. Basic image processing techniques we are using is convolution with different block sizes on the shifted image for block based algorithm.

## Workload

As per the flowchart below and gravity of the task the following is assigned with fair & equal workload.

| TASK | PARTNER(S) |
|---|---|
| Implementation of Block-Based Algorithm | Jayaraj |
| Debugging of Block-Based Algorithm | Arun & Jayaraj |
| Understanding of Reference Paper of Dynamic Programming Algorithm | Arun |
| Implementation of Dynamic Programming Algorithm | Arun & Jayaraj |
| Debugging of Dynamic Programming Algorithm | Arun & Jayaraj |
| Implementation and Debugging of proposed Dynamic Programming Algorithm | Arun & Jayaraj |
| Final Report | Arun & Jayaraj |

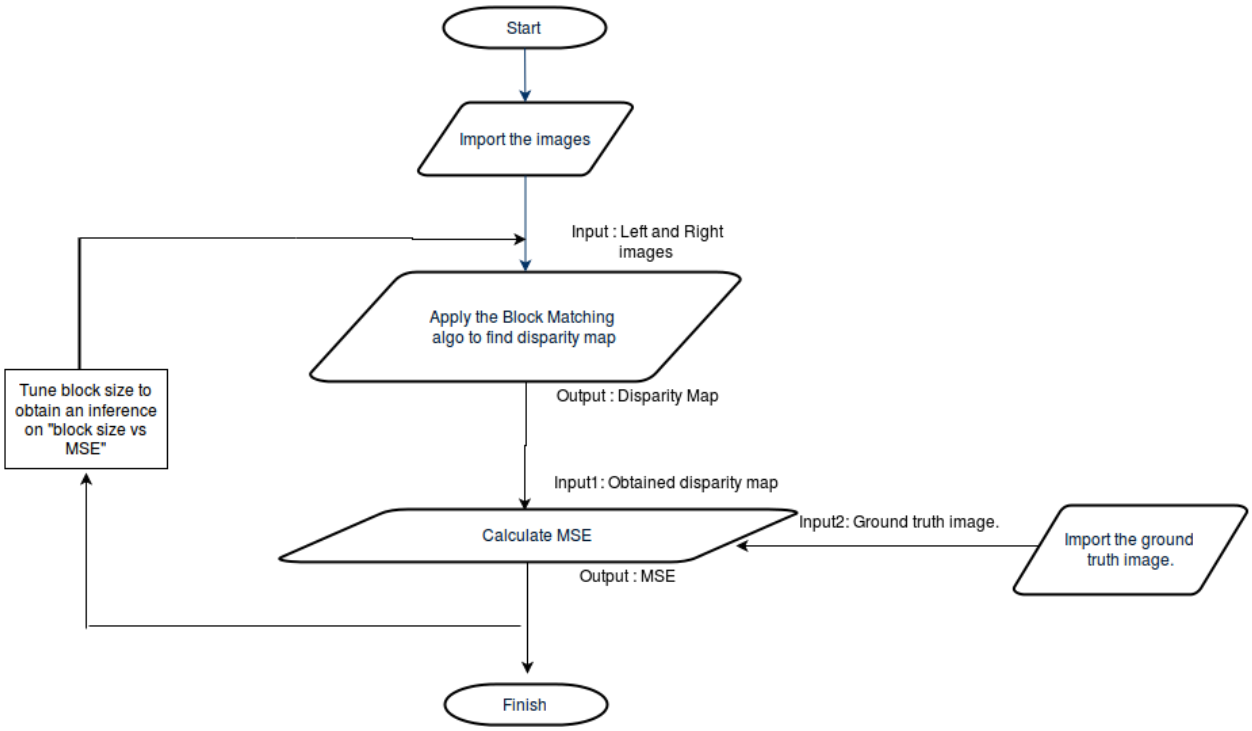
Individual tasks are allotted as per the workload, one of us is implementing Block Based algorithm and simultaneously other will understand the reference paper based on Dynamic Programming. Since Dynamic Programming Algorithm and debugging needs more time, we spread that task equally. For implementation of more efficient dynamic programming algorithm, we need more brainstorming for that, so we split that equally too. The report will be done along with the submodule completion.

## Project Schedule

| TASK | DATE |
|---|---|
| Implementation of Basic Block Matching Algorithm and Debugging | 11/24/2016 (Week 1) |
| Understanding of Reference Paper of Dynamic Programming Algorithm | 11/24/2016 (Week 1) |
| Implementation of Dynamic Programming Algorithm and Debugging | 12/2/2016 (Week 2) |
| Implementation of proposed Dynamic Programming Algorithm and Debugging | 12/5/2016 (Week 3) |
| Final Report | 12/6/2016 (Week 3) |

# Flowcharts

## Flowchart for Block Matching Algorithm




## Flowchart for Dynamic Programming Algorithm