**Weekly Progress Report (WPR)**

Domain of Engineering and Technology

**Amity School of Engineering and Technology**

 Week: 2 Duration: 06/06/2022 to 12/06/2022

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| **To be filled by Student** | |
| Name of Student: | Sanjana |
| Enrolment No. | A2305220739 |
| Programme & Semester | B.Tech (4CSE) |
| Project Title finalized, if Yes, give name, if No, give reason(s) | Pollution detection using image processing |
| Synopsis submitted | yes |
| Literature review | nil |
| Technical & Economical Feasibility | yes |
| Bill of Material | nil |
| Project Progress Schedule (PERT Chart) | Week 1-knowing about image processing and platforms to implement it  Week 2- knowing about methodology  Week 3-implementing code for calculation  Week 4-Adding GUI for program |
| Design of critical components | yes |
| Fabrication work (give %) | 5% |
| Experimental work (give %) | 95% |
| Result and Analysis | In an image depending upon colours scattered in environment, we can calculate their range. While calculating variance of each pixel, we can not the variance in an image. Thus, we can mathematically give information about the deviation and analyse pollution through a picture |
| Report writing | nil |
| Signature of student |  |
| Work done in this week: | Implemented the code in visual studio. Found data like variance, covariance and correlation in an image. In theory part, learned about scattering phenomenon in more detail and ways to calculate variance-covariance data |

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| **To be filled by Guide (strike off whichever is not applicable)** |
| Performance of students is satisfactory |
| Performance of students is unsatisfactory |
| A warning to be issued to student |
| Student was not well |
| **Date: Signature of Guide** |