

Monthly Progress Report

Project ID: P096

Date: 30/08/2025

Project Title: White Light Interferometry

Student names (with Roll no): Abhishek Iyer (112401002) & Hemanth Kashyap Gundamaraju (112301009)

Mentor/s: Arvind Ajoy

Work done in the current month (Limit to maximum 2 pages):

- Understood the working principle and the theory behind a White Light Interferometer
- Created a timeline and plan for the project and laid out a roadmap on how to complete the project
- Learned about the mathematics behind deep learning and AI models
- Created a Python program to generate random, arbitrary height maps using Simplex Noise Fractal Brownian Motion (Simplex FBM)
- Created a Python program to generate a corresponding waveform from the output of the first program to create a dataset to train the AI model by using the theory behind white light interferometer.

Feedback from the mentor/s: Students need to be more proactive in sharing their progress with the mentor. Have advised them to share slides every week clearly highlighting the work done

Otherwise good progress.

Signature of the mentor/s with Date

