

Pre-Class Assignment 7

Reading Material 1: A Computational Model of a SPAD

Question 1:

Please list some special effects of SPADs besides pile-up. Choose one of them to explain the reason for it, and how to model it.

Reading Material 2: Single-photon computational 3D imaging at 45 km

Question 2:

Why are SPADs suitable for ultra-long-range active optical imaging?

Question 3:

Briefly explain the forward model in long-range conditions.