



University College Dublin
Ireland's Global University

Project Details:	
Host Institution:	University College Dublin (UCD)
Location:	Belfield, Dublin 4, Ireland
College/Company:	College of Engineering & Architecture
School/Unit:	School of Electrical & Electronic Engineering
Website:	https://www.ucd.ie/eece/

Project Lead:	
Name:	Professor John Sheridan
Email Contact:	john.sheridan@ucd.ie
Telephone Contact	+353 1 716 1927

Project Title:
Investigate new computational techniques for measuring sub-pixel displacements in images.

Brief Project Description:
Background reading:
M. Wan, J.J. Healy and J.T. Sheridan, "Fast, sub-pixel accurate, displacement measurement method: optical and terahertz systems," Optics Letters, Vol. 45, No. 22, 2020.
and
J.J. Healy, M. Wan and J.T. Sheridan, "Direction-sensitive fast measurement of sub sampling-period delays," in IEEE 8th International Conference on Signal Processing and Integrated Networks (SPIN), 2021, pp. 228-232.

Project Dates:
From the end of May to August (specific dates and weekly hours can be agreed between the PI and the student directly over a 10-week period).

Candidate Requirements:
Flexibility and enthusiasm. Interest in optics, computer programming.