

# Shape-Aware Deep Learning for AS-OCT Analysis: Segmentation and Structural Uncertainty

**Invited Speaker**

**Bing Yang**  
*SUSTech*

**Date:** January 21, 2026 (Wednesday)

**Time:** 14:00-15:00 (Hong Kong Time)

**Zoom Meeting:** 801 137 0362

## Biography

Bing Yang received his Ph.D. from the Southern University of Science and Technology (SUSTech) in 2025, supervised by Chair Professor Jiang Liu. He was also a Visiting Student at the Department of Biomedical Engineering, The Chinese University of Hong Kong (CUHK). His research interests lie at the intersection of medical image analysis and deep learning, with a specific focus on ophthalmic imaging (AS-OCT), shape-aware modeling, and uncertainty estimation. Dr. Yang has published his work in top-tier journals and conferences.

## Abstract

Precise quantification of the ciliary muscle in AS-OCT remains challenging due to inherent image noise and weak boundaries. In this talk, Dr. Yang introduces a shape-aware deep learning framework designed to bridge the gap between data-driven algorithms and anatomical consistency. He will discuss how explicitly modeling shape priors—ranging from local boundary refinement to global Active Shape Models—enables not only accurate segmentation but also trustworthy structural uncertainty estimation and label-efficient learning.