Special Track: **Machine Learning in Ophthalmology**

17th International Symposium on Visual Computing

San Diego, CA, USA

October 3-5, 2022

http://www.isvc.net

Scope

The advent of deep learning, a sub-field in Artificial Intelligence (AI), has made a significant impact on many biomedical imaging applications from detection of malignant tissue in mammographs to determining calcium signal propagations in smooth muscle cells. Recently, deep learning models have attracted the attention of researchers and clinicians in the ophthalmic domain. This has led to the approval of the first AI system for automatic diagnosis of diabetic retinopathy (DR) by the food and drug administration (FDA). In this special track, we plan to bring researchers and clinicians from the two fields of machine learning and ophthalmology to discuss the most recent advances in deep learning that has made significant impacts on the way ophthalmic data is visualized, interpreted, and analyzed for diagnosis of vision threatening diseases.

This special track invites research contributions on innovative work to help with diagnosis of diseases that affect human visual perception. Of particular interest are research contributions employing modern computer vision techniques, powered by statistical and machine/deep learning models, addressing the above challenges.

Topics

Topics of interest include but are not limited to:

- Automated Diagnosis of Ophthalmic Conditions
- Anomaly Detection in Ophthalmic Images
- 2D/3D Segmentation of Ophthalmic Data

- Generative Models for Ophthalmic Data Fusion, Analysis, and Interpretation
- Self/Semi- Supervised Learning from Limited Ophthalmic Data

Organizers

Alireza Tavakkoli, University of Nevada, Reno, USA
Julia Owen, University of Washington, USA

Important Dates

See http://www.isvc.net/

Paper Submission

See http://www.isvc.net/index.php/paper-submission/