

APTOSxJSAIO 2025 AI workshop

Time: June 27th 2025

Time table:

Time	Topic	Speaker	Notes
0-5mins	Workshop introduction		Explain the focus and outline of the workshop.
5-25mins	Oculomics and exemplar projects (Q&A included)	Lisa Zhu	Introduce the context of Oculomics and 1-2 research examples.
25-55mins	AutoMorph presentation + hands-on session (Q&A included)	Yukun Zhou	Introduce AutoMorph and use examples.
55-60mins	Resting		
60-90mins	RETFound presentation + hands-on session (Q&A included)	Yukun Zhou	Introduce RETFound and use examples.

Teaching Materials:

- **AutoMorph slides:**
https://docs.google.com/presentation/d/1wh_4Veovk7tbwUCA_OLATszpKKIkclMN2U_yb8b8nzE/edit?usp=sharing
- **AutoMorph Google Colab:** https://bit.ly/automorph_colab
- **RETFound slides:**
<https://docs.google.com/presentation/d/1TF0WMLkZuSSTMTD0ASiSowjNR-KedW8gl3drpT-7FJc/edit?usp=sharing>
- **RETFound Google Colab:** https://bit.ly/retfound_colab

Reference:

[1] Zhou, Y., Wagner, S.K., Chia, M.A., Zhao, A., Xu, M., Struyven, R., Alexander, D.C. and Keane, P.A., 2022. AutoMorph: automated retinal vascular morphology quantification via a deep learning pipeline. *Translational vision science & technology*, 11(7), pp.12-12.

[2] Zhou, Y., Chia, M.A., Wagner, S.K., Ayhan, M.S., Williamson, D.J., Struyven, R.R., Liu, T., Xu, M., Lozano, M.G., Woodward-Court, P. and Kihara, Y., 2023. A foundation model for generalizable disease detection from retinal images. *Nature*, 622(7981), pp.156-163.