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EDUCATION

2017	MS	Computer Science and Technology, University of Jinan, Jinan, China
2013	BS	Computer Science and Technology, University of Jinan, Jinan, China

PROFESSIONAL POSITIONS

2019-present	Research assistant, Casey Eye Institute, OHSU, Portland, OR
2017-2018	Visiting scholar, Casey Eye Institute, OHSU, Portland, OR

INTELLECTUAL PROPERTY

1. Jia Y, **Guo Y**. Identifying retinal layer boundaries. *US Patent App*. 16/998,931, 2021
2. Jia Y, **Guo Y**. Detecting avascular areas using neural networks. *US Patent App*. 16/858,384, 2020

ACADEMIC AWARDS

1. 2021 Outstanding Reviewers. *Optical Society of America (OSA)*

PEER REVIEWED JOURNAL PAPERS

1. You QS, Camino A, Wang J, **Guo Y**, Flaxel CJ, Hwang TS, Huang D, Jia Y, Bailey ST. Geographic Atrophy Progression Is Associated With Choriocapillaris Flow Deficits Measured With Optical Coherence Tomographic Angiography. *Investigative Ophthalmology & Visual Science*. 2021 Dec. Vol.62. 28.
2. Tsuboi K, You QS, **Guo Y**, Wang J, Flaxel CJ, Bailey ST, Huang D, Jia Y, Hwang TS. Association between fluid volume in inner nuclear layer and visual acuity in diabetic macular edema. *American Journal of Ophthalmology*. 2021 Dec 21.
3. Gao M, Hormel TT, Wang J, **Guo Y**, Bailey ST, Hwang TS, Jia Y. An Open-Source Deep Learning Network for Reconstruction of High-Resolution OCT Angiograms of Retinal Intermediate and Deep Capillary Plexuses. *Translational vision science & technology*. 2021;10(13):13.
4. Xiong H, You QS, **Guo Y**, Wang J, Wang B, Gao L, Flaxel CJ, Bailey ST, Hwang TS, Jia Y. Deep learning-based signal-independent assessment of macular avascular area on 6×6 mm optical coherence tomography angiogram in diabetic retinopathy: a comparison to instrument-embedded software *British Journal of Ophthalmology*.2021 Sep 13:bjophthalmol-2020-318646.
5. Liu K, **Guo Y**, You QS, Hormel TT, Hwang TS, Jia Y. Normative intercapillary distance and vessel density data in the temporal retina assessed by wide-field spectral-domain optical coherence

tomography angiography. *Experimental biology and medicine (Maywood, NJ)*. 2021; 15353702211036700.

6. **Guo Y**, Hormel TT, Pi S, Wei X, Gao M, Morrison JC, Jia Y. An end-to-end network for segmenting the vasculature of three retinal capillary plexuses from OCT angiographic volumes. *Biomedical Optics Express*. 2021 July 16; 12:4889-4900.
7. **Guo Y**, Hormel TT, Gao L, You QS, Wang B, Flaxel CJ, Bailey ST, Choi D, Huang D, Hwang TS, Jia Y. Quantification of nonperfusion area in montaged wide-field optical coherence tomography angiography using deep learning in diabetic retinopathy. *Ophthalmology Science*. 2021 May 12:100027.
8. You QS, Tsuboi K, **Guo Y**, Wang J, Flaxel CJ, Bailey ST, Huang D, Jia Y, Hwang TS. Comparison of Central Macular Fluid Volume with Central Subfield Thickness in Patients with Diabetic Macular Edema Using Optical Coherence Tomography Angiography. *JAMA ophthalmology*. 2021 May 13.
9. Gao L, Wang J, You QS, **Guo Y**, Flaxel CJ, Hwang TS, Huang D, Jia Y, Bailey ST. Plexus-specific retinal capillary avascular area in exudative age-related macular degeneration with projection-resolved OCT angiography. *British Journal of Ophthalmology*. 2020 Dec 21.
10. You QS, Wang J, **Guo Y**, Pi S, Flaxel CJ, Bailey ST, Huang D, Jia Y, Hwang TS. Optical coherence tomography angiography avascular area association with 1-year treatment requirement and disease progression in diabetic retinopathy. *American journal of ophthalmology*. 2020 Sep 1; 217:268-77.
11. Gao M, **Guo Y**, Hormel TT, Sun J, Hwang TS, Jia Y. Reconstruction of high-resolution 6x6-mm OCT angiograms using deep learning. *Biomedical Optics Express*. 2020 Jul 1; 11(7):3585-600.
12. You QS, **Guo Y**, Wang J, Wei X, Camino A, Zang P, Flaxel CJ, Bailey ST, Huang D, Jia Y, Hwang TS. Detection of clinically unsuspected retinal neovascularization with wide-field optical coherence tomography angiography. *Retina*. 2020 May 1;40(5):891-7.
13. Camino A, Ng R, Huang J, **Guo Y**, Ni S, Jia Y, Huang D, Jian Y Depth-resolved optimization of a real-time sensorless adaptive optics optical coherence tomography. *Optics letters*. 2020 May 1;45(9):2612-5.
14. Wang J, Hormel TT, Gao L, Zang P, **Guo Y**, Wang X, Bailey ST, Jia Y. Automated Diagnosis and Segmentation of Choroidal Neovascularization in OCT Angiography using Deep Learning. *Biomedical Optics Express*. 2020 Feb 1;11(2):927-44.
15. You QS, Wang J, **Guo Y**, Flaxel CJ, Hwang TS, Huang D, Jia Y, Bailey ST. Detection of reduced retinal vessel density in eyes with geographic atrophy secondary to age-related macular degeneration using projection-resolved optical coherence tomography angiography. *American Journal of Ophthalmology*. 2020 Jan 1; 209:206-12.
16. Wang J, Hormel TT, You QS, **Guo Y**, Wang X, Chen L, Hwang TS, Jia Y. Robust non-perfusion area detection in three retinal plexuses using convolutional neural network in OCT angiography. *Biomedical Optics Express*. 2020 Jan 1;11(1):330-45.
17. **Guo Y**, Hormel TT, Xiong H, Wang J, Hwang TS, Jia Y. Automated segmentation of retinal fluid volumes from structural and angiographic optical coherence tomography using deep learning. *Translational vision science & technology*. 2020 Jan 28;9(2):54-.
18. Wei X, Hormel TT, **Guo Y**, Jia Y. 75-degree non-mydriatic single-volume optical coherence tomographic angiography. *Biomedical Optics Express*. 2019 Dec 1;10(12):6286-95.

19. Camino A, **Guo Y**, You QS, Wang J, Huang D, Bailey ST, Jia Y. Detecting and measuring areas of choriocapillaris low perfusion in intermediate, non-neovascular age-related macular degeneration. *Neurophotonics*. 2019 Sep;6(4):041108.

20. **Guo Y**, Hormel TT, Xiong H, Wang B, Camino A, Wang J, Huang D, Hwang TS, Jia Y. Development and validation of a deep learning algorithm for distinguishing nonperfusion area from signal reduction artifacts on OCT angiography. *Biomedical Optics Express*. 2019 Jul 1;10(7):3257-68.

21. Wei X, Hormel TT, Pi S, **Guo Y**, Jian Y, Jia Y. High dynamic range optical coherence tomography angiography (HDR-OCTA). *Biomedical Optics Express*. 2019 Jul 1;10(7):3560-71.

22. Wang B, Camino A, Pi S, **Guo Y**, Wang J, Huang D, Hwang TS, Jia Y. Three-dimensional structural and angiographic evaluation of foveal ischemia in diabetic retinopathy: method and validation. *Biomedical Optics Express*. 2019 Jul 1;10(7):3522-32.

23. Pi S, **Guo Y**, Huang D, Morrison JC, Jia Y. Monitoring retinal responses to acute intraocular pressure elevation in rats with visible light optical coherence tomography. *Neurophotonics*. 2019 Jul;6(4):041104.

24. **Guo Y**, Camino A, Wang J, Huang D, Hwang TS, Jia Y. MEDnet, a neural network for automated detection of avascular area in OCT angiography. *Biomedical Optics Express*. 2018 Nov 1;9(11):5147-58.

25. **Guo Y**, Camino A, Zhang M, Wang J, Huang D, Hwang T, Jia Y. Automated segmentation of retinal layer boundaries and capillary plexuses in wide-field optical coherence tomographic angiography. *Biomedical Optics Express*. 2018 Sep 1;9(9):4429-42.

26. Li J, **Guo Y**, Ma L. MCSHM: A simple and practical method for moving objects detection in dynamic scenes. *In 2017 Chinese Automation Congress (CAC)*. 2017 Oct 20 (pp. 5112-5118). IEEE.

27. Yu X, **Guo Y**, Li J, Cai F. An image patch matching method based on multi-feature fusion. *In 2017 10th International Congress on Image and Signal ProcessingI BioMedical Engineering and Informatics (CISP-BMEI)*. 2017 Oct 14 (pp. 1-6). IEEE.

28. **Guo Y**, Yu X, Li J. A classification method of epithelial cells and clue cells based on multi-scale texture analysis. *In 2016 9th International Congress on Image and Signal Processing, BioMedical Engineering and Informatics (CISP-BMEI)*. 2016 Oct 15 (pp. 432-436). IEEE.