

OPHTHALMIC DISEASE DIAGNOSIS BASED ON CONVOLUTIONAL NEURAL NETWORK

Sang-hyup SEO¹, Youngho WOO² and Hyojung LEE¹

1) *Busan Center for Medical Mathematics, National Institute for Mathematical Science, Busan 49241, Republic of Korea*

2) *National Institute for Mathematical Science, Daejeon 34047, Republic of Korea*

Corresponding Author : Sang-hyup SEO, saibie1677@nims.re.kr

ABSTRACT

Recently, for aged people, diabetic retinopathy(DR), aged macular degeneration(AMD), and glaucoma are increased in Korea. They are major ophthalmic diseases which occur vision damage. The aged people need periodic diagnosis with a fundus camera for eyes. But, in these days, periodic diagnosis are hard to be done because there are not sufficient ophthalmic doctors and the ophthalmic inspections are dependent on tertiary-care hospitals. Therefore, an A.I. which does diagnosis for ophthalmic diseases is being developed through a research project. The A.I. will help non-ophthalmic doctors with their ophthalmic diagnosis and make periodic diagnosis easier. In this presentation, we give you introductions for the A.I. model, and the image data which are contained in the training process.

REFERENCES

1. Yoo, Hyeong-gon and Lee, Jae-hong, *Funduscopy Examination*, Naewae-haksool, 2013.