THE HONG KONG POLYTECHNIC UNIVERSITY

SCHOOL OF OPTOMETRY

Post Specification

2-year Post-doctoral fellowship

The ITF-funded project: Towards an Intelligent Eyeglass with Autocorrection, hosted by The Hong Kong Kong Polytechnic University (QS ranking: 65th), is inviting applications for a 2-year postdoctoral contract to develop smart adaptive eyeglasses combining a wearable optics visual analyzer and adaptive corrective focus. The smart adaptive eyeglass aims to capture the natural accommodative dynamics in real-world environments and provide in-depth adaptive optics adjustment for visual training and correction of accommodative deficiencies in presbyopic and low-vision populations.

The candidate will join an international team of experts in the field of Optics (Dr. Alexander Goncharov, Dr Charles-Edouard Leroux, Dr Elie De Lestrange-Anginieur), Visual Science (Dr Elie De Lestrange-Anginieur, Prof. Allen Cheong, Prof George Woo), and Electronics (Prof Eric Cheng) including:

- the School of Optometry <u>Home | School of Optometry (polyu.edu.hk)</u> and the Department of Electrical and Electronic Engineering <u>Home | Department of Electrical and Electronic Engineering (polyu.edu.hk)</u> at the Hong Kong Polytechnic University,
- the MIPA laboratory <u>Laboratoire MIPA Mathématiques</u>, <u>Informatique</u>, <u>Physique et Applications (unimes.fr)</u> at the University of Nimes and,
- the Applied Optics group <u>Applied Optics University of Galway (nuigalway.ie)</u> at the University of Galway.

As a member of the ITF-project, the postdoctoral candidate will be primarily based in Hong Kong. He/She will work at the School of Optometry – an international research center recognized for its high-impact research on refractive anomalies and age-related ocular diseases.

The appointee is expected to develop the optomechanical design of the corrective lens system. The development will involve designing, building, and testing the optics and mechanical housing of the adaptive lens, and contributing to its optomechanical integration into the adaptive optics visual analyzer.

Qualifications

- Ph.D degree in Optics, or related science disciplines;
- Experience in optical engineering;
- Proficiency in ray-tracing software such as Zemax and Code V;
- Knowledge of mechanical software such as Solidworks;
- Proficiency in English.

Appointment details:

- Full-time fixed-term contract (24 months).
- Salary: HK\$ 30,000/month.

Workplace: The Hong Kong Polytechnic University (Hong Kong).

• Starting date: 1 July 2024

Application procedure

Interested applicants, please send your resume to Dr Elie De Lestrange-Anginieur at elie.delestrangeanginieur@polyu.edu.hk for further information.

Application deadline

Consideration of applications will commence on 18/03/2024 until the position is filled.

Date 18-03-2023