

THE HONG KONG POLYTECHNIC UNIVERSITY

DEPARTMENT OF COMPUTING

Post Specification

Full-time or Part-time Research Assistant/Associate (several posts)

[Appointment period: 3 months to 12 months initially, with possibility of further appointment]

The appointee will assist the project leader in the projects of wireless human sensing. The candidate will propose new solutions where sensing applications can be achieved using mmWave radar systems. Solutions will be investigated from simulated algorithmic concepts to hardware demonstration.

The candidate is expected to tackle the following tasks:

- (a) Propose, develop, and test innovative solutions for wireless sensing applications, such as driver status monitoring and hand hygiene monitoring. Our work includes three parts: physical modeling and radar echo generation, signal processing, and ML-based method improvement.
- (b) Manage software simulation environments (primarily C, Matlab, or python) used to simulate wireless sensing systems.
- (c) prepare the project documents.
- (d) perform any other duties as assigned by the Project Leader or his delegates.

Qualifications

Applicants should have:

- (e) a master or bachelor degree in Electrical Engineering, Computer Science, Communication Engineering, Internet of Things, Smart Manufacturing, or other related majors.
- (f) skillful hands-on experience in wireless sensing systems and proven knowledge in radar domains.
- (g) deep understanding of wireless signals and DSP algorithms.
- (h) familiar with programming in C, Matlab, and Python.
- (i) familiar with machine learning theory and algorithms.
- (j) a good command of English; and
- (k) good communication and interpersonal skills.

Preference will be given to those with research and/or project development experience.

Applicants are invited to contact

Prof. Jiannong Cao: Tel no. 2766 7275, Email jiannong.cao@polyu.edu.hk

OR

Dr Wei Ren: Email wei-2022.ren@polyu.edu.hk, Wechat ly714826881 for further information.

Remuneration

A highly competitive remuneration package will be offered. Applicants should state their current and expected salary in the application.

Feb. 2023