

Accelerated Hiring Post 传感硬件与固件开发助理/ 博后

2026.6.5 (validate until 2026.8)

The [Sensing, Sustainability and Society Lab \(S3L\)](#) is urgently looking to hire a **research assistant/postdoc** (potentially to continue as a PhD/postdoc beyond the contract) for an in-cabin environmental sensing project. This project mainly involves the development of sensing and control hardware and firmware for a compact, durable system based on [our previous project](#).

About the Position

- **One** research assistant or postdoc for **6 months (starts asap, can remote-work before prototyping)**;
- The terms are flexible for those who want to look for a longer-term commitment (continue a PhD degree or a postdoc in the group), as well as for those who want to enrich their research experience through the summer (a strong reference letter will be given upon satisfactory performance);
- Competitive salaries of **HKD 20,000 for RA** and **HKD 35,000 for postdoc** (25% higher than the baseline).

Eligibility

- Strong background in *electronic/electrical engineering, mechatronics engineering, IoT technologies, embedded systems, or edge computing*;
- Solid experience in microcontroller development (such as ARM Cortex, ESP32, STM32, or Particle.io ecosystems), sensors, and digital signal processing;
- Preferences will be given to those who have previously physically prototyped their own designs;
- Strong hands-on engineering ability and eager to explore miniature sensing technologies and edge AI's usage in future urban studies.

Core responsibilities

- Integrate and coordinate various environmental sensors for continuous, stable in-cabin data collection;
- Manage hardware communication protocols (I2C, SPI, UART) to interface air quality and environmental sensors with microcontrollers;
- Develop an efficient pathway for data backend storage and visualization.

Application materials

- CV stating your educational background, ranking in class, project experience, and awards;
- One-page statement that summarizes your **most notable design, project, or prototype** with a demonstration (not counted toward the one-page, preferably with illustrations, website, or animation);

感知、可持续与社会实验室 (S3L) 现**紧迫**招聘一名**研究助理或博士后**。全面负责一项**车内环境移动感知系统**的研发项目。本期 6 个月的项目将纯粹聚焦于**硬件与嵌入式固件**的工程开发。工作重点是基于 MIT [开源项目 Flatburn](#) 的架构，面向车内环境重新设计并打造出一套**紧凑、耐用且高稳定性**的低功耗软硬件感知系统。

岗位说明

- 聘期 **6 个月** (尽快到岗, 可在硬件原型开发前远程工作);
- 既适合寻求长期发展 (之后在本组继续攻读博士学位或续聘博士后) 的申请者, 也欢迎希望利用暑期丰富科研履历的同学 (表现优异者将获得强推荐信);
- 研究助理每月 20,000 港币, 博士后每月 35,000 港币 (比通常高出约 **25%**)。

岗位要求

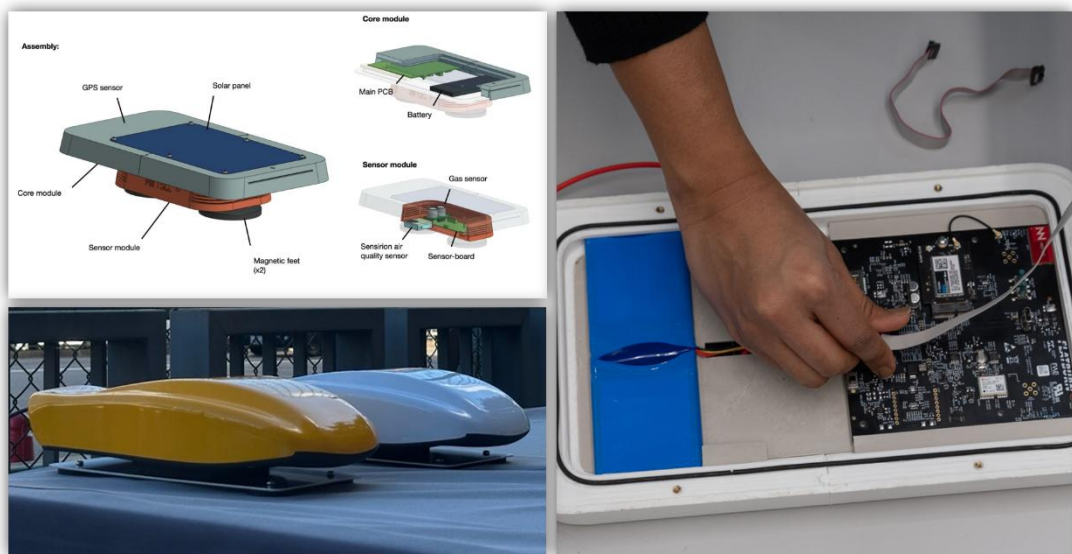
- 电子/电气工程、机械电子工程、物联网技术、嵌入式系统或边缘计算等专业;
- 在微控制器开发 (如 ARM Cortex、ESP32、STM32 或 Particle.io 生态系统)、传感器集成以及数字信号处理方面具备扎实经验;
- 优先考虑此前曾独立完成过物理硬件原型设计的申请者;
- 具备极强的工程动手能力, 对多模态感知技术与边缘人工智能的应用感兴趣。

核心工作职责

- 集成并协调各类环境传感器, 以实现持续、稳定的车内数据采集;
- 负责硬件通信协议 (I2C、SPI、UART) 的管理与调试, 实现空气质量等环境传感器与微控制器的稳定接口连接;
- 开发高效的数据后端存储与可视化通路。

申请材料

- **个人简历 (CV):** 请注明教育背景、专业/班级排名、项目经历及所获奖项;
- **一页纸总结陈述:** 简要介绍你最得意的一项设计、项目或原型系统, 并**附带作品演示** (不计入篇幅限制, 形式不限, 优先考虑附带插图、网站链接或动画演示)。



Source: <https://github.com/MIT-Senseable-City-Lab/flatburn>