

SUMMER INTERNSHIP



NOKIA
BELL
LABS

Pervasive Systems Research
Nokia Bell Labs, Cambridge, UK

(w)Earable, IoT, Edge and Mobile AI

NOKIA AND BELL LABS

Nokia is a global leader in the technologies that connect people and things. Powered by the pioneering work of Bell Labs, our research and innovation division, and Nokia Technologies, we are at the forefront of creating and licensing the technologies that are increasingly at the heart of our connected lives. Nokia Bell Labs is internationally renowned as the birthplace of modern information theory, the transistor, the laser and the UNIX operating system.

BELL LABS CAMBRIDGE

Bell Labs' research facility in Cambridge is a leading lab working in the areas of Mobile and Wearable Sensing and Systems, Applied Machine Learning, Social Computing and Internet of Things research.

We have multiple (on-site only) openings for 2024 summer internships in our Pervasive Systems research department. The department studies the forms, intelligence and applications of mobile, IoT, wearable devices. The department's research objectives include but not limited to:

- Enhancing compute, communication, and thermal efficiency of the next billion smart devices.
- Building data-efficient, distributed robust and automated device intelligence
- Designing collaborative, privacy-preserving, and interactive multi-device systems

Find a concise overview of our research and latest publications [here](#).

Multiple positions are available for each of the following three topics.

SENSING & COMPUTING ON THE BODY

Exploration of signal processing and machine learning algorithms on wearables for next generation applications. Example applications include, but are not limited to, managing health (e.g., monitoring vital signs), improving personal awareness and enhancing human hearing.

SKILLS SOUGHT: Any subset of areas including Digital Signal Processing, On-Device ML, Embedded Software, and Electronics.

MACHINE LEARNING FOR THE EDGE

Exploration of algorithms and system challenges for data-efficient machine learning on heterogenous edge devices. Topics of interest include, but are not limited to self-supervised learning, federated learning, model adaptation and privacy-preserving ML.

SKILLS SOUGHT: Any subset of areas including Data-Centric ML, Multimodal ML, Foundation Models, and knowledge of audio, speech, vision, and sensor data processing.

COLLABORATIVE EDGE SYSTEMS

Study of the algorithmic and system challenges for building collaborative sensing solutions with wearables and edge devices for emerging applications around mobile health, video analytics, and IoT.

SKILLS SOUGHT: Any subset of areas including Mobile Systems, Embedded Software, On-Device ML, and Edge Computing.

Application Deadline : **Jan 15, 2024**

Selection of applicants will occur on a rolling basis, with decisions being communicated by February 29, 2024, at the latest.

Please write to Lorena Qendro (lorena.qendro@nokia-bell-labs.com) and Fahim Kawsar (fahim.kawsar@nokia-bell-labs.com) stating your interest.