

SUMMER INTERNSHIP

NOKIA Bell Labs

Pervasive Systems Research
Nokia Bell Labs, Cambridge, UK

(w)earable, IoT, Edge 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 openings for 2022 summer internships in our Pervasive Systems research department. Students currently enrolled in a PhD or Masters program (Computer Science or Electrical Engineering) are being recruited for the following projects. **Multiple positions are available for each of the following four topics.**

COMPUTING AROUND THE EAR

Exploration of the signal processing and machine learning algorithms with earables to manage health (e.g., monitoring vital signs), improve personal awareness and enhance human hearing.
SKILLS SOUGHT: Sensor Signal Processing, Machine Learning, Embedded Systems.

ENERGY AUTONOMOUS COMPUTATIONAL MATERIALS

Exploration of forms, and associated algorithms and system challenges for energy efficient intelligent materials, e.g., e-textiles, perceptive jewellery, etc.
SKILLS SOUGHT: Embedded SW, HW Prototyping, Sensor Signal Processing, Applied ML.

COLLABORATIVE EDGE AI

Study of the algorithmic and system challenges for building collaborative sensing solutions with wearables and edge devices for sensory applications including mobile health, video analytics, and IoT.
SKILLS SOUGHT: Distributed System, Embedded SW, Applied ML.

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.
SKILLS SOUGHT: Solid understanding of ML, Knowledge of audio, speech, vision, and sensor data processing.

Application Deadline : **Jan 31, 2022**

Given the COVID-19 pandemic situation, the internship mode and period are flexible and open for discussion.

Applicants will be selected on a rolling basis.

Please write to Chulhong Min (chulhong.min@nokia-bell-labs.com) or Fahim Kawsar (fahim.kawsar@nokia-bell-labs.com) stating your interest.