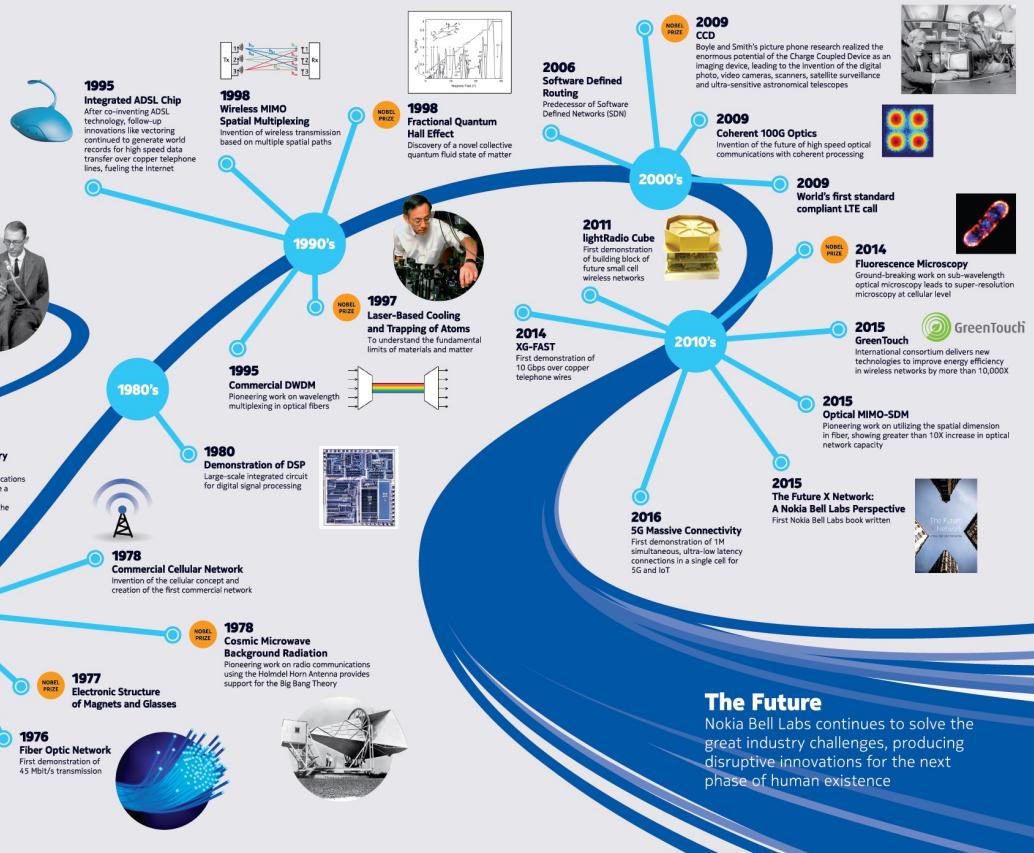
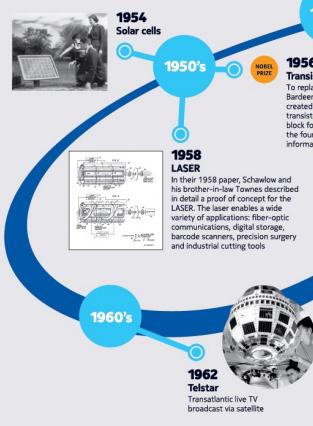


Inventing the Future X Network

Creation of Bell Labs
The engineering departments of the American Telephone and Telegraph Company (AT&T) and Western Electric were consolidated into Bell Telephone Laboratories. This was the birthplace of research and design communication technologies for the rapidly expanding telephone network, and also the fundamental area of a science that could shape the future of the industry. Over the years, more than half of all the greats of modern society have been invented at Bell Labs and 8 Nobel Prizes have been awarded to its researchers.



The Future

Nokia Bell Labs continues to solve the great industry challenges, producing disruptive innovations for the next phase of human existence.

RESEARCH INTERN POSITION

Pervasive Systems Research
Nokia Bell Labs, Cambridge, UK

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 Sensing and Systems, Applied Machine Learning, Social Computing and Internet of Things research.

We have openings for 2019 summer internships in our Pervasive Systems Department. Interns are being recruited for the following projects.



IoT, Mobile Systems, Embedded AI

Human Sensing with Earables

Study of the algorithmic and system challenges for a custom earable sensing platform. Focus on behavioural recognition scenarios.

Skills Sought: Prior multi-modal sensing experience (audio, motion, RF sensors); Strong systems skills.

Wearable + Server-less AI for Human Sensing

Study of the algorithmic and system challenges for building a collaborative sensing solution with wearables and edge devices. Focus on human augmentation.

Skills Sought: Strong systems skills; Backend technologies, Basic ML understanding.

Battery-less Wearables for Human Sensing

Exploration of a battery-less wearable sensing platform and applications for physical activity recognitions.

Skills Sought: Hardware prototyping skills, Embedded SW development; Basic ML understanding.

Robustness of Deep Sensory Models

Exploring domain adaptation and generative modelling techniques (e.g., GANs) to improve the robustness and generalisability of deep models to new operating scenarios.

Skills Sought: Advanced skills in at least one deep learning framework (Tensorflow, Pytorch, Keras); Knowledge of audio and speech processing.

Hyper-local Conversational Agent

Developing a context-aware and intermittent commutation framework for opportunistic multimodal interaction with physical space using mobiles and wearables.

Skills Sought: Mobile/embedded computing, Layer 2+ knowledge on WLANs.

On-device Always-on Continual Learning for Personal-Scale Sensory Applications

The project will focus on the development of a lightweight system for embedded/mobile devices capable of processing and adapting to streaming data and tasks locally on-device without offloading.

Skills Sought: Machine learning; Experience with TensorFlow or PyTorch.

Learning Algorithms for Radio Sensing

What benefits can machine learning offer across the wireless stack for human sensing? We want to find out, starting with physical measurements.

Skills Sought: Machine learning experience; Applied mathematics and statistics. Familiarity with software-defined radio a plus.

Apply Today!

Write to **Alessandro Montanari** or **Fahim Kawzar** stating your interest.

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