

# Postdoc, PhD, and MSc positions in development of 6G radio access network for Internet-of-Everything

## Description

The Department of Electronics Engineering, Sabanci University, invites qualified applicants for a 2-to-4 years' postdoc/PhD/MSc positions offering applicants to join the research on Cost-Efficient 6G Radio Access Network for Internet-of-Everything.

## Expected start date and duration of employment

These are a 2-to-4 years' positions starting from 1st June 2023 or as soon as possible.

## Qualifications

Knowledge in wireless communications, radio resource management, and or any adjacent field (e.g., cryptography).

Knowledge and/or experience in the field of AI/ML are preferred.

Good skills in communication of research results internationally as evidenced by publications in excellent peer-reviewed journals.

TOEFL score of more than 80 is a prerequisite for any MSc and PhD program.

## Project topics

6G radio access network for Internet-of-Everything:

- Enabling technologies: 6G New Radio; IoT/IoE; UAV communications; self-organized network (SON); non-orthogonal multiple access (NOMA); cellular planning; mmWave technology.
- Theory: signal processing; detection and estimation theory; radio propagation; communication theory; information theory; and networking.
- Machine learning: Bayesian learning; reinforcement learning; and federated learning.
- Decision control: dynamic programming; message passing.
- Optimization: convex optimization; linear programming; and game theory.

## Who we are

Sabanci University (SU) is leading the ranks in Turkey as the most innovative research university. SU is currently ranked among the top 500 worldwide according to the QS World University Ranking, 48th in the Times Higher Education Young University Rankings and 20th in Times Higher Education Emerging Economies University Rankings. The Electronics department is ranked among the top 250 worldwide according to the QS World University Ranking.

## What we offer

A research climate encouraging lively, open, and critical discussion within and across different fields of research

A workplace characterized by professionalism, equality and a healthy work-life balance.

**MSc:** In addition to tuition waver of value \$18,000(US dollar) per year, excellent student will benefit from project scholarship of minimum TL10000 (Turkish Lira) per month. The university will also offer free housing and private insurance.

[Financial Aid and Scholarships for Graduate Students | FACULTY OF ENGINEERING AND NATURAL SCIENCES \(sabanciuniv.edu\)](#)

Excellent MSc students with high research output will have the chance to spend 4 to 6 months in Texas A&M University or Concordia University.

**PhD:** In addition to tuition waver of \$21,000 (US dollar) per year, excellent student will benefit from project scholarship of minimum TL14,000 (Turkish Lira) per month. The university will also offer free housing and private insurance.

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Excellent PhD students with high research output will have the chance to spend 4 to 6 months in Texas A&M University or Concordia University.

**Postdoc:** Excellent candidate will benefit from project fellowship of minimum TL19,000(Turkish Lira) per month. The university will also offer housing and private insurance. Postdoc with excellent research record can apply for MSCA-PF, providing 4000Euro stipend per month. Moreover, they will have the chance to spend 4 to 6 months in Texas A&M or Concordia.

The students working in this project will be in close collaboration with well established faculty members at Sabanci University, Texas A&M University and Concordia University. The electronics engineering department has a strong connection with the industry that will be involved throughout the project.

#### **Applications files**

CV and motivation letter

#### **Contact information**

For further information, please contact: Prof. Mohaned Chraiti

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