PHD POSITION IN ELECTRONICS ENGINEERING AT SABANCI UNIVERSITY, ISTANBUL

BACKGROUND

Sabancı University Readout Integrated Circuit (SUROIC) research group conducts experimental and applied research on readout technologies for infrared detectors.

Infrared imaging systems can be used for variety of applications such as surveillance, medical imaging, astronomy, industry and weather forecasting. In high performance infrared systems, integrated readout and detector is fabricated on different substrates and they are directly bonded together with flip chip bonding method. Most common detectors are InGaAs, InSb and HgCdTe which can be operated at room or cryogenic temperatures. Readout part is responsible for pre-amplifying, integrating and processing photo currents for further signal processing with FPGA. Integrated readout is fabricated using 0.18µm and below CMOS technologies.

OBJECTIVE

PhD research focuses on analog, digital and mixed mode integrated circuit design in the scope of readout electronics.

Readout electronics consists of various analog and digital sub-blocks such as pre-amplifier, op-amp, buffer, counter, comparator, ADC and DAC. Readout design methodologies like low power, low noise, linearity and process invariance can be investigated and applied on CMOS circuits.

QUALIFICATIONS

- The candidate has a diploma, M.Sc., or equivalent in electrical/electronic engineering.
- Solid background in CMOS analog integrated circuits is essential.
- Knowledge of IC design flow using Cadence® or other CAD tools.
- Experience of tape-out is not required but plus.
- Knowledge of Verilog/HDL is a plus.

CONTACT AND APPLICATION

If you are interested in position please contact with Prof. Yaşar Gürbüz, yasar@sabanciuniv.edu

In your mail include; short cover letter which describing your qualifications, curriculum vitae (CV), transcripts and name of your references.