MSc. and PhD Position in Electronics Engineering at Sabanci University, Istanbul

BACKGROUND

Sabanci University RFIC (SURFIC) group mainly focuses on the design and the implementation of high performance, low cost and application specific RF/microwave/millimeter-wave integrated circuits by using state-of-the-art SiGe BiCMOS technologies. In particular, the research team is interested in design of wireless transceivers and subsystems which includes related front-end integrated circuits like power amplifiers, low noise amplifiers, voltage controlled oscillators, phase shifters, mixers and phase-locked-loop as well as passive components; inductors and RF switches.

Aside from RFIC design, our research team is involved in process technologies, design and manufacturing of RF MEMS devices/systems for wireless transceivers. In this domain, our research team is competent at RF MEMS Switches and replacing the conventional RF passives like inductor, varactor and resonator with their high quality counterparts in RF MEMS.

OBJECTIVE

MSc/PhD research focuses on the analog and RF/mm-wave/sub-mmwave integrated circuit design in the scope of on-chip phased arrays and imaging systems.

Phased arrays consist of various front-end sub-blocks such as phase shifters, power amplifiers, low noise amplifiers, T/R switches and SPDT switches. In the area of mm-wave imaging, SURFIC focus on the implementation of passive mm-wave/sub-mmwave imaging systems in a state-of-the art SiGe BiCMOS technology with $f_{T}/f_{max}$ of 300/500 GHz. RF/mm-wave integrated circuit design methodologies like low noise, high linearity and low power can be investigated and applied on SiGe BiCMOS circuits.

QUALIFICATIONS

- The candidate has a diploma, M.Sc., or equivalent in electrical/electronic engineering.
- Solid background on BiCMOS analog/RF integrated circuits is essential.
- In-depth understanding of IC design flow using Cadence® or other CAD tools.
- Tape-out experience is not required but plus.
- Experience with EM simulation tools like Sonnet and ADS 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.