

# Center for Integrated Circuits and Systems (CICS)

## Research Review

### Agenda

May 5, 2021 via Zoom Meeting

10:45 AM	Prof. Harry Lee	Welcoming Remarks
10:55 AM	Prof. Vivienne Sze	Research Overview
11:05 AM	Soumya Sudhakar	Balancing Actuation and Computing Energy in Motion Planning
11:35 AM	Prof. Ruonan Han	Research Overview
11:45 AM	Muhammad Ibrahim Wasiq Khan	A 0.31 THz CMOS Array Enabling Generation and Detection of Waves with Orbital-Angular Momentum
12:05 PM	Mina Kim	A Dual-Loop Sub-THz Molecular Clock with 20 ppt Long-Term Stability Using Simultaneous Fundamental and High-Order Spectroscopic Detection
12:25 PM		Break
12:55 PM	Prof. Harry Lee	Research Overview
1:05 PM	Rishabh Mittal	Jitter Tolerant Pipeline ADC
1:35 PM	Prof. Anantha Chandrakasan	Research Overview
1:45 PM	Mohamed Abdelhamid	Wireless and Batteryless Self-reconfigurable in-Body Microimplants
2:05 PM	Vipasha Mittal	Thermal Noise-Based Temperature Sensor
2:25 PM	Prof. Max Shulaker	Research Overview
2:35 PM	Tathagata Srimani	Beyond-Silicon Technologies for Beyond-Silicon Applications
3:05 PM		Break
3:20 PM	Prof. Song Han	Putting AI on a Diet: TinyML and Efficient Deep Learning
3:30 PM	Han Cai	Efficient Neural Architecture Search and Tiny Transfer Learning
4:00 PM	Prof. Negar Reiskarimian	Research Overview
4:10 PM	Soroush Araei	Leveraging Block Digital Filtering to enable Fully-Passive Analog/RF FIR filters
4:40 PM	Prof. David Perreault	Research Overview
4:50 PM	Mike Ranjram	A Miniaturized Data Center Power Supply Using a Split-Phase, Fractional Turn Transformer
5:20 PM	Prof. Charlie Sodini	Research Overview
5:30 PM	Dr. Anand Chandrasekhar/Hanrui Wang	Algorithms for Continuous Absolute Blood Pressure Monitoring
6:00 PM		Adjourn