Stanford

Constantine Sideris

Associate Professor of Electrical Engineering

Bio

BIO

Constantine Sideris is an Associate Professor of Electrical Engineering at Stanford University. Previously, he was an Assistant Professor at the University of Southern California from 2018 to 2025 and an Associate Professor from 2025 to 2026. He received the B.S., M.S., and Ph.D. degrees with honors from the California Institute of Technology in 2010, 2011, and 2017 respectively. He was a visiting scholar at UC Berkeley's Wireless Research Center from 2013 to 2014. He was a postdoctoral fellow in the departments of Electrical Engineering and Computing and Mathematical Sciences at Caltech from January 2017 to August 2018.

He was the recipient of an ONR YIP award in 2023, an NSF CAREER award in 2021, an AFOSR YIP award in 2020, an AFOSR DURIP award in 2021, the Caltech Leadership Award in 2017, and an NSF graduate research fellowship in 2010. His research is highly interdisciplinary and bridges the fields of bioengineering, medicine, applied mathematics and computation with electrical engineering and physics.

His research interests include analog/RF integrated circuits, photonic integrated circuits, and computational electromagnetics for biomedical and biosensing applications and wireless communications. His current interests in biomedical devices include portable Point-of-Care in-vitro biosensors, wearable devices for real-time monitoring and analysis of biological signals, ingestible "smart" pills, and implantable devices. His current interests in computational electromagnetics include developing fast algorithms for simulating RF and nanophotonic devices and coupling them with efficient optimization algorithms to achieve the automated design of new, high-performance electromagnetic devices.

ACADEMIC APPOINTMENTS

- Associate Professor, Electrical Engineering
- Member, Bio-X

LINKS

- ACME Research Group Website: https://acme.stanford.edu

Teaching

COURSES

2025-26

- Computational Electromagnetics: EE 292L (Win)
- Design Projects in VLSI Systems I: EE 272 (Win)

- Design Projects in VLSI Systems II: EE 372 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Leen Abdul Razzak

Postdoctoral Faculty Sponsor

Bernd Hofmann

Publications

PUBLICATIONS

- **Foundry-fabricated grating coupler demultiplexer inverse-designed via fast integral methods** *COMMUNICATIONS PHYSICS*
  Sideris, C., Khachaturian, A., White, A. D., Bruno, O. P., Hajimiri, A.
  2022; 5 (1)