USC Viterbi
School of Engineering
Ming Hsieh Department of Electrical and Computer Engineering

Ming Hsieh Institute **Seminar Series**

Integrated Systems

Reshaping the A/MS Design Industry with Generators

Dr. Elad Alon

CEO, Blue Cheetah Analog Design

Date: Friday, October 7th , 2022 - Time: 2:00pm -Location: EEB 132
Zoom Link/Code: Meeting ID: 947 5819 7738, Passcode: 062790
Refreshments will be served

Abstract: The semiconductor industry is in the midst of multiple technological, societal, and market trends – including a resurgence of customized silicon solutions, global capacity shortages, and the end of scaling derived reductions in cost per transistor - that are all aligning to drive surging demand for IC designs. Accordingly, demand has never been higher for the A/MS components / sub-systems underlying all modern chips, and yet the supply of A/MS design engineers has at best remained flat over the last ~10-20 years. In this talk I will describe how generator-based design – where we algorithmically codify and capture expert engineers' methodologies – allow us to "force multiply" the efforts of expert designers and rapidly realize customized, process-portable A/MS designs.

Biography:

Dr. Elad Alon is the CEO and co-founder of Blue Cheetah Analog Design, which is leveraging generator-based design methodologies to rapidly deliver tailored A/MS designs to meet our customers' diverse needs. He is an Adjunct Professor at UC Berkeley in the EECS Department, where he was a Full Professor until Jul. 2021. He has served as an advisor or consultant to many semiconductor and electronics companies, including Lion Semiconductor (acquired by Cirrus Logic), Ayar Labs, Intel, Xilinx, Cadence, Wilocity (acquired by Qualcomm), and Cadence. He has been recognized with multiple best-paper (from the ISSCC, VLSI, and CICC conferences) as well as teaching awards, has led several multi-institutional research programs, and was elevated to the rank of IEEE Fellow in 2020.

Hosted by Prof. Hossein Hashemi, Prof. Mike Chen and Prof. Constantine Sideris
Organized and hosted by Vinay Chenna (vchenna@usc.edu).