

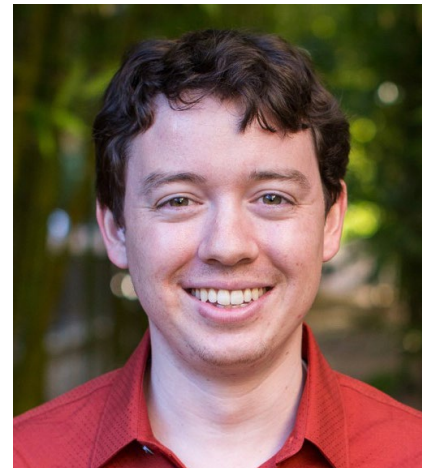
Building High Performance Carbon Nanotube Transistors

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San Jose, California, USA**Date: Friday, June 16, 2023 13:30-15:00****Venue: Faculty of Engineering Bldg. 2, Room 31B****Abstract:**

Low dimensional 1D carbon nanotubes hold promise as candidate channel materials for highly scaled and high performance transistors beyond the limits of Silicon-based transistors. Single-CNT FET experimental studies are utilized for insight into the quality and operating principles of device component modules including channel, doping, contact, and gate-stack. Recent advances from our team to integrate the best device components together on dense arrays of CNT to demonstrate high performance scaled CNT MOSFETs. A summary of remaining challenges and device design tradeoffs will help to give clear direction for future studies.



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