Lecture 1: Admin & Overview Announcements: • Welcome to EE 105: Microelectronic Devices & Circuits Instructor: Prof. Clark T.-C. Nguyen All lectures will be recorded by both ETS and myself • Lecture pdfs and video will post on the course website in the "Lecture" link Welcome to EE 105 ♦ Pdfs nearly immediately Microelectronic Devices & Circuits ♦ Videos maybe 2 days later (post processing) If you miss a lecture ... can watch the video, if Prof. Clark Nguyen successfully recorded Seople who think they will watch the videos, often don't get time to do so · Your first HW comes next lecture Discussions start next week Labs start the week after next ♦ Monday, Sept. 3 is a holiday, so the Monday lab will start one week later ♦ The Tuesday lab starts Sept. 4 Above announced on Piazza • Will let in concurrent enrollments next week • Lecture Topics: **S** A Bit About Me & Course Syllabus (information sheet) & Course Schedule Scholing Information and Policy **Skeview of Signal Types** School Motivation: Digital Communications

- About Me:
- <u>Education</u>: Ph.D., University of California at Berkeley, 1994
- <u>1995</u>: joined the faculty of the Dept. of EECS at the University of Michigan
- <u>2006</u>: (came back) joined the faculty of the Dept. of EECS at UC Berkeley
- <u>Research</u>: microelectromechanical systems (MEMS) that employ transistor-level circuit design
- <u>Teaching</u>: (at the UofM) mainly transistor circuit design courses; (UC Berkeley) 140, 143, 240A, W240A, 243, 245, 247B, W247B
- <u>2001</u>: founded Discera, the first company to commercialize vibrating RF MEMS technology
- <u>Mid-2002 to 2005</u>: DARPA MEMS program manager
 - ⅍ran 10 different MEMS-based programs
 - <u>topics</u>: power generation, chip-scale atomic clock, gas analyzers, nuclear power sources, navigation-grade gyros, on-chip cooling, micro environmental control
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- Go thru Course Syllabus (information sheet)
- Go thru Course Schedule
- · Go thru Grading Information and Policy
- All of these are online in the course homepage
- The course website is at
 - ♦ https://inst.eecs.berkeley.edu/~ee105/fa18/
 - ♦ (just google ee105)