

**NMIP****Northeast Microelectronics Internship Program***Microelectronics runs the world. Come join us!*

Hi, I'm Max Hodin and this is my NMIP Story

Company: Finwave Semiconductors

University: Tufts University

Project Title: Mixed Signal Circuit Design and Device Sizing

Focus Area: Semiconductor PDK Development

I first learned how to take measurements on silicon wafers and how to extract relevant statistics out of the raw data. Over the next few weeks, I learned how and why those statistics are important for semiconductor device development. This included getting at the fundamentals of what each basic circuit element really is: resistor, capacitor, inductor, and eventually transistor. Using an EDA platform, I simulated and designed different circuits for the next round of wafer fabrication. I worked with experts in company on realistically sizing the devices and certain drawbacks of the device models not reflected in simulation.

What I enjoyed Most: I valued the level of difficulty the most. My *coworkers did not attempt to shield me from information that was not considered "intern-level,"* which I sincerely appreciate. I was able to learn exactly why we were doing what we were doing, making me feel more engaged with my everyday work.