

Asian American Engineer of the Year

Dr. Wai Lee

Chief Technologist and TI Fellow
Texas Instruments



Citation of Accomplishment:

Sustained technical contribution and leadership in the development of integrated circuits for mobile phones, high-speed internet infrastructure, and energy-efficient home entertainment systems.

Dr. Wai Lee is a TI Fellow at Texas Instruments and the Chief Technologist for the company's Audio, Imaging, and Sensor Products business.

Over the last 25 years, Wai has made significant contributions to the semiconductor industry in several areas: high-frequency hetero-junction bipolar transistors (HBTs) in SiGe and InGaAs material systems, low-power Digital Signal Processing for wireless communication, high-speed integrated CMOS SERDES (SERializer-DESerializer) for networking applications, and high energy-efficient audio power amplifiers.

These contributions have helped the development of mobile phones, high-speed internet, and energy-efficient home entertainment systems. These technologies have had a lasting impact on modern society and the ways of life of the human kind.

Wai has readily shared his knowledge and experience with other engineers through numerous journal publications and conference presentations. He has authored and co-authored about 40 journal publications in IEEE and APS journals. He has given over 20 conference presentations at various IEEE conferences as well as given invited talks at leading universities around the world, including MIT and Tsinghua University.

Wai has also served on technical program committees for a number of premium international conferences, including International Solid-State Circuit Conference (ISSCC) and VLSI Circuit Symposium.

Wai earned his S.B., S.M., and Ph.D. in Electrical Engineering from the Massachusetts Institute of Technology. His doctoral dissertation was on "The Fabrication and Characterization of InGaAs/InAlAs Heterojunction Bipolar Transistors."

In the community, Wai has served as a mentor to many young engineers, especially engineers of Asian descent. He participates in and contributes to fund-raising events for charitable organizations, including the United Way and Make-a-Wish Foundation. He also serves as an assistant ride leader for the Plano Bicycle Association, which promotes safe cycling in Plano, TX and builds/donates bicycles for disadvantaged children in the community.

