Edward A. Lee is the Robert S. Pepper Distinguished Professor in EECS at the University of California at Berkeley, where he has been on the faculty since 1986. He is the author of several books and more than 300 papers and has delivered more than 170 keynote and other invited talks at venues worldwide. Lee's research focuses on cyber-physical systems, which integrate physical dynamics with software and networks. His focus is on the use of deterministic models as a central part of the engineering toolkit for such systems. He is the director of the nine-university TerraSwarm Research Center, a director of iCyPhy, the Berkeley Industrial Cyber-Physical Systems Research Center, and the director of the Berkeley Ptolemy project. From 2005-2008, he served as chair of the EE Division and then chair of the EECS Department at UC Berkeley. He led the development of several influential open-source software packages, notably Ptolemy and its spinoffs. From 1979 to 1982 he was a member of technical staff at Bell Labs in Holmdel, New Jersey. He is a co-founder of BDTI, Inc. and has consulted for a number of other companies. He is a Fellow of the IEEE, was an NSF Presidential Young Investigator, won the 1997 Frederick Emmons Terman Award for Engineering Education, and received the 2016 Outstanding Technical Achievement and Leadership Award from the IEEE Technical Committee on Real-Time Systems (TCRTS).

Prof. Lee got his Ph.D. from UC Berkeley in 1986, where his thesis focused on architectures and software for real-time signal processing. His masters is from MIT, where his thesis focused on image processing. His bachelor's degree is from Yale, where he double majored in Computer Science and Engineering and Applied Science. Between his masters and Ph.D., he spent two years at AT&T Bell Labs, where he worked on embedded software for data communications.

For a summary of Prof. Lee's research, see: http://eecs.berkeley.edu/~eal/research.html. His research centers on the role of models, particularly deterministic models, in the engineering of cyber-physical systems. The most significant research contributions of his group to date are (roughly in reverse chronological order by start date):

- A demonstration that determinism is incomplete.
- A family of processor architectures that deliver repeatable timing.
- A deterministic programming model for distributed real-time systems.
- Rigorous semantics for hybrid systems, which mix discrete and continuous dynamics.
- Mathematical models for concurrent and timed systems.
- Techniques for the engineering of complex systems.
- Open-source software for modeling and design of cyber-physical systems and the IoT.
- Dataflow models for signal processing and parallel computation.

Some key publications (complete list at http://eecs.berkeley.edu/~eal/publications.html):

- H. Kim, E. Kang, E. A. Lee, and D. Broman, "A Toolkit for Construction of Authorization Service Infrastructure for the Internet of Things," International Conference on Internet-of-Things Design and Implementation (IoTDI), Pittsburgh, April 2017. Best Paper Award.
- E. A. Lee, "Fundamental Limits of Cyber-Physical Systems Modeling," ACM Tr. on Cyber-Physical Systems, Vol. 1, No. 1, Article 3, November, 2016.
- E. A. Lee, "The Past, Present, and Future of Cyber-Physical Systems: A Focus on Models," Sensors, 15(3), p. 4837-4869, Feb. 2015 (open access).
- E. A. Lee, "Computing Needs Time," Comm. of the ACM, Vol. 52, Issue 5, May 2009.
- S. A. Edwards and E. A. Lee, "The case for Precision Timed (PRET) Machines," DAC, June, 2007.