



Published on DATE 2019 (<https://past.date-conference.com>)

[Home](#) > [Printer-friendly PDF](#) > Printer-friendly PDF

11.0 LUNCH TIME KEYNOTE SESSION

Date: Thursday, March 28, 2019

Time: 13:20 - 13:50

Location / Room: Room 1

Chair:

Marc Geilen, Eindhoven University of Technology, NL, [Contact Marc Geilen](#)

Co-Chair:

Sander Stuijk, Eindhoven University of Technology, NL, [Contact Sander Stuijk](#)

Time	Label	Presentation Title Authors
13:20	11.0.1	A FUNDAMENTAL LOOK AT MODELS AND INTELLIGENCE Author: Edward Lee, UC Berkeley, US Abstract <i>Models are central to building confidence in complex software systems. Type systems, interface theories, formal semantics, concurrent models of computation, component models, and ontologies all augment classical software engineering techniques such as object-oriented design to catch errors and to make software more modular and composable. Every model lives within a modeling framework, ideally giving semantics to the model, and many modeling frameworks have been developed that enable rigorous analysis and proof of properties. But every such modeling framework is an imperfect mirror of reality. A computer system operating in the physical world may or may not accurately reflect behaviors predicted by a model, and the model may not reflect behaviors that are critical to correct operation of the software. Software in a cyber-physical system, for example, has timing properties that are rarely represented in formal models. As artificial intelligence gets more widely used, the problem gets worse, with predictability and explainability seemingly evaporating. In this talk, I will examine the limitations in the use of models. I will show that two very different classes of models are used in practice, classes that I call "scientific models" and "engineering models." These two classes have complementary properties, and many misuses of models stem from confusion about which class is being used. Scientific models of intelligent systems are very different from engineering models.</i>
13:50		End of session
15:30		Coffee Break in Exhibition Area

Coffee Breaks in the Exhibition Area

On all conference days (Tuesday to Thursday), coffee and tea will be served during the coffee breaks at the below-mentioned times in the exhibition area.

Lunch Breaks (Lunch Area)

On all conference days (Tuesday to Thursday), a seated lunch (lunch buffet) will be offered in the Lunch Area to fully registered conference delegates only. There will be badge control at the entrance to the lunch break area.

Tuesday, March 26, 2019

- Coffee Break 10:30 - 11:30
- Lunch Break 13:00 - 14:30
- Keynote Lecture "Leonardo da Vinci, Humanism and Engineering between Florence and Milan" by Claudio Giorgione in room 1 13:50 - 14:20
- Coffee Break 16:00 - 17:00

Wednesday, March 27, 2019

- Coffee Break 10:00 - 11:00
- Lunch Break 12:30 - 14:30
- Keynote Lecture "Heterogeneous, High Scale Computing in the Era of Intelligent, Cloud-Connected" by David Pellerin, Amazon, US in room 1 13:50 - 14:20
- Coffee Break 16:00 - 17:00

Thursday, March 28, 2019

- Coffee Break 10:00 - 11:00
- University Booth Best Demo Award Presentation at the University Booth 10:30
- Lunch Break 12:30 - 14:00
- Keynote Lecture "A Fundamental Look at Models and Intelligence" by Edward A. Lee, University of California, Berkeley, US in room 1 13:20 - 13:50
- Coffee Break 15:30 - 16:00

Source URL: <https://past.date-conference.com/conference/session/11.0>