



September 14, 2017 - Toyota Annual Review

32-G449-Patil

- 9:00-9:30am Arrival, breakfast
- 9:30-9:45am Welcome, introductions
- 9:45-10:15am TRI Perspective
Gill Pratt, Chief Executive Officer, Toyota Research Institute
- 10:15-10:45am CSAIL Projects overview
Daniela Rus, Director, CSAIL

DRIVING

- 10:45-11:00am A Parallel Autonomous Driving System: *Daniela Rus, Sertac Karaman*
- 11:00-11:15am Decision Making for Parallel Autonomy in Clutter: *Daniela Rus, Sertac Karaman*
Title: TBA
Presenter:
- 11:15-11:30am Tools and Data to Revolutionize Driving: *Daniela Rus, Sertac Karaman*
Title: TBA
Presenter:
- 11:30-11:45am BREAK
- 11:45-12:00pm Driver-Friendly Bilateral Control for Suppressing Traffic Instabilities:
Berthold Horn
Title: TBA
Presenter:
- 12:00-12:15pm Geordi - A Driver's Assistant for Risk-Bounded Maneuvering: *Brian Williams*
Title: TBA
Presenter:
- 12:15-12:30pm Uhura - A Driver's Personal Coach for Managing Risk: *Brian Williams*
Title: TBA

Presenter:

12:30-12:45pm WiFi Based Obstacle Detection for Robot Navigation: *Dina Katabi*
Title: TBA
Presenter:

12:45-1:45pm LUNCHEON- Star Seminar Room 32-D463

PERCEPTION - LANGUAGE

1:45-2:00pm Analysis by Synthesis Revisited: Visual Scene Understanding by Integrating Probabilistic Programs and Deep Learning: *Josh Tenenbaum*
Title: TBA
Presenter:

2:00-2:15pm Crossing the Vision-Language Boundary for Contextual Human-Vehicle Interaction: *Jim Glass*
Title: TBA
Presenter:

2:15-2:30pm Drinking from the Visual Firehose: High-Frame-Rate, High-Resolution Computer Vision for Autonomous and Assisted Driving: *Saman Amarasinghe, Fredo Durand*
Title: TBA
Presenter:

2:30-2:45pm Using Vision and Language to Read Minds: *Nick Roy, Boris Katz*
Title: TBA
Presenter:

2:45-3:00pm Predicting a Driver's State-of-Mind: *Antonio Torralba, Wojciech Matusik*
Title: TBA
Presenter:

3:00-3:15pm Exploring the World of High Definition Touch: *Ted Adelson*
Title: TBA
Presenter:

3:15-3:30pm BREAK

VERIFICATION - VALIDATION

3:30-3:45pm Formal Verification Meets Big Data Intelligence to Address the Trillion Miles Challenge: *Armando Solar-Lezama*
Title: TBA
Presenter:

- 3:45-4:00pm Simulation and Verification for Vision-in-the-Loop Control: *Fredo Durand*
Title: TBA
Presenter:
- 4:00-4:15pm The Car Can Explain!: *Gerry Sussman, Hal Abelson, Lalana Kagal, Daniel Weitzner*
Title: TBA
Presenter:
- 4:15-4:30pm Uncovering the Pain Points in Driving: *Ruth Rosenholtz, Fredo Durand, Bill Freeman, Aude Oliva, Antonio Torralba*
Title: TBA
Presenter:
- 4:30-5:30pm Discussion, Posters and Demos – R&D Commons
- 6:00-7:30pm Dinner, Catalyst Restaurant

