Chairs' Welcome

We are very pleased to present the Adjunct Proceedings of the 10^{th} ACM International Conference on Automotive User Interfaces and Interactive Vehicular Applications (AutomotiveUI '18). The 2018 conference is hosted by the University of Toronto.

AutomotiveUI is the premier forum for user interface (UI) research in the automotive domain, bringing together researchers from both academia and the industry. As in previous years, the papers and presentations of AutomotiveUI '18 target novel vehicle technologies through models and concepts for enhancing the driver experience, performance, and behavior, the development of semi and fully autonomous driving, and the needs of different user groups, including passengers and pedestrians.

This year's conference continues again to take a close look at automotive user interaction techniques, such as by investigating the potential of thermal or ultrasonic feedback for optimizing efficiency and minimizing distractions of drivers' manual interaction in the cockpit. Also, empirically-derived guidance on specific aspects of augmented reality and volumetric displays is provided. Beyond direct user control, there is also a number of novel contributions on attentive user interfaces that infer the best time for touch interaction or for take-overs from automated driving to manual driving.

Several papers featured in this year's proceedings relate to specific user experience phenomena of assisted and automated driving. This includes empirical studies on age diversity among drivers and factors for trust expectancy and technology acceptance. A dedicated paper session has been devoted to the study of contextual aspects of the driving situation, such as visual peripheral and auditory cues to raise situation awareness. Another topic of interest was qualitative research of situational factors for the use of automated driving or vehicle-to-vehicle communication features. We have also observed an increased number of high-quality investigations of improving awareness and communication of cars with other traffic participants, such as communication between automated vehicles with pedestrians.

These proceedings contain 27 of the 28 accepted works-in-progress, 10 workshop proposals, 7 demos, and 5 video papers. The topics covered include but are not limited to automated vehicles, driver information processing, display and control design, in-vehicle information systems, and vehicle-pedestrian interactions.

The accepted full papers can be found in the main proceedings.

Submission and Review Processes

Authors were invited to submit full papers, as well as works-in-progress, interactive demos, videos, workshops, and doctoral colloquium position papers.

Proposals for workshops were peer-reviewed by members of the workshop program committee with relevant expertise. The final program and submissions of the workshops were modified according to the recommendations of the reviewers. All submissions were deemed relevant to the interests of the conference participants and, indeed, we received overwhelming registration for the proposed events.

The submissions to the works-in-progress track were peer-reviewed by members of the work-in-progress program committee with relevant expertise, who also invited additional reviewers using a double-blind review process. Neither the reviewers knew the names of the authors, nor the authors the names of the reviewers. In total, each submission received at least three reviews, including at least one review conducted through the double-blind process. A program committee member summarized the reviews and provided recommendations regarding acceptance of a submission. The final decisions were made by the work-in-progress co-chairs. We received a record number of 58 submissions and accepted 28 (48%).

Submissions to interactive demos were selected using a peer review process. After the initial reviewers made their recommendation, the final decisions were made by the interactive demo chairs. Each submission received at least two reviews.

Video submissions were selected by a small group of curators. Criteria for acceptance were the content of the work and its presentation. Further, original videos were prioritized.

Presentations

The accepted workshops take place on the first day of the conference Full papers are presented as oral talks and posters during the conference. Accepted works-in-progress are presented in one session as posters. The interactive demos are presented in one session. The videos are played during a separate session.

Two keynotes and a panel session are enriching the conference: Christopher A. Hart (Former Chairman of NTSC) and Angela Schoellig (University of Toronto) will be talking about lessons learned from aviation automation and technological capabilities/limitations of building self-driving vehicles. A panel session titled "Automotive User Interfaces - What We Know and the Future" will be moderated by Joanne Harbluk (Transport Canada).

We would like to thank the members of the organizational and technical committees of all tracks for their outstanding work and team effort, as well as the hard-working members of the program committees and all reviewers. You all contributed to the organization of an exciting program for AutomotiveUI 2018 in Toronto!

Finally, we would like to thank our sponsors and exhibitors in supporting the conference. Sponsorship and exhibitors bring incomparable visibility to the leading conference on Automotive User Interfaces and we are grateful to have an exciting number of renowned international institutions and companies support us.

Birsen Donmez, University of Toronto, Canada, General Chair

Ronald Schroeter, Queensland University of Technology, Australia, Work-In-Progress Co-Chair,
Huei-Yen "Winnie" Chen, SUNY University at Buffalo, US, Work-In-Progress Co-Chair,
Ignacio Alvarez, Intel Corporation, US, Sponsorship, Exhibit, and Demo Co-Chair,
Ioannis Politis, University of Cambridge, UK, Sponsorship, Exhibit, and Demo Co-Chair,
Andrew L. Kun, University of New Hampshire, US, Workshop Co-Chair,
Lewis Chuang, Max Planck Institute for Biological Cybernetics Tübingen, Germany, Workshop Co-Chair,
Myounghoon "Philart" Jeon, Virginia Tech, US, Video Co-Chair,
Jing Feng, North Carolina State University, US, Video Co-Chair,
Bruce N. Walker, Georgia Institute of Technology, US, Technical Program Co-Chair,
Peter Fröhlich, Austrian Institute of Technology GmbH, Austria, Technical Program Co-Chair.

Toronto, Canada, September 2018