



**October 4, 2020, Victoria, BC, Canada**

The Multi-Sensor Positioning and Navigation for Connected and Autonomous Vehicles (CAVs) workshop will provide a forum for scientists from industry and academia engaged in research and development to convene and present their latest scholarly work in positioning and navigation for CAVs. The event will feature a number of diverse activities including keynote speeches by highly distinguished speakers, a technical panel discussion, and best paper award.

**KEYNOTE SPEAKERS:**

**Keynote Speaker I:** (Naser El-Sheimy – Canada Research Chair in Geomatics Multi-Sensor Systems, University of Calgary)

**Keynote Speaker II:** (Rakesh Kumar, Subsystems Lead Engineer, General Motors (GM), Canada)

**Future CAVs Challenges and Opportunities PANEL: Members (TBD)**

**Workshop Chairs**

**Aboelmagd Noureldin and Amr El-Wakeel**

**NavINST Research Laboratory (<http://www.navinst.ca>)**

**Royal Military College of Canada**

**Technical Program Committee**

**Yang Gao, University of Calgary, Canada**

**Ahmed El-Rabbany, Ryerson University, Canada**

**Kai-Wei Chiang, National Cheng Kung University, Taiwan**

**Kyle O’Keefe, University of Calgary, Canada**

**Ahmed El-Mowafy, Curtin University, Australia**

**Umar Iqbal, Mississippi State University, USA**

**Lianwu Guan, Harbin Engineering University, China**

**Sherin Abdelhamid, Ontario Centers of Excellence, Canada**

**Adel Moussa, University of Calgary, Canada**

**Abdalla Osman, Harman International, USA**

**Mostafa El-Houshi, Huawei Technologies, Canada**

**Mohamed Elsheikh, University of Calgary, Canada**

**Mohamed Tamazin, AAST, Egypt**

**Malek Karaim, Queen’s University, Canada**

**Haidy Elghamrawy, RMCC, Canada**

**IMPORTANT DATES**

**Paper Submission, **June 19, 2020** (Extended)**

**Notification of Acceptance, **July 06, 2020****

**Final Paper Submission, **July 14, 2020****

Prospective authors are invited to submit their full papers (5 pages, and up to 2 additional pages maximum) using TrackChair online submission system.

(<https://vtc2020-fall-rr.trackchair.com/track/1906>)

Submitted papers will be peer-reviewed. The accepted and presented papers will be submitted for indexing in IEEE Xplore. Topics include but not limited to:

- GNSS Precise Point Positioning (PPP) for CAVs
- Wireless Positioning based on UWB and Cellular Network.
- V2X Technologies for CAVs Positioning & Navigation
- Inertial Navigation Systems
- Perception Systems for Positioning and Navigation (LiDAR, Vision, Radar, Ultrasound and HD maps)
- Multi-Sensor Integrated Positioning & Navigation for CAVs
- Multi-Modal Positioning
- Machine Intelligence based Multi-sensor Fusion
- Computer Vision and Machine Learning for CAVs positioning and Navigation
- High precision cooperative and networked positioning for CAVs
- Vehicular IoT for CAVs
- Visible Light Vehicular Positioning for CAVs
- Positioning and Navigation for Smart Cities Enabling Technologies and Services
- Signal processing for satellite-based positioning
- Advanced Multi-Sensor Fusion methods
- Crowdsourcing-based Positioning for CAVs