# Webinar and Virtual Workshop:
# *On the Road to Autonomy*

Sponsored by
*Inside Unmanned Systems Magazine*
and
Hexagon Positioning Intelligence

**Wednesday, December 12th 1:00 pm EST**

## On the Road to Autonomy

Join us for this Free Webinar on Wednesday, December 12th, at 1:00 pm EST. See just how far we've traveled on the road to autonomy and to test the following predictions for our autonomous future.

- Prediction #1 - Future applications (especially autonomous ground vehicles) will require precise positioning at the cm level
- Prediction #2 - One of the few technologies that can provide that precision today is GNSS RTK and PPP
- Prediction #3 - This level of precision will be enabled even more with the introduction of new GNSS constellations

The panel of experts for this exciting event are:

**Lance de Groot**, Senior Team Lead, Geomatics Software Safety Critical Systems, NovAtel

**Samer Khanafseh**, a research assistant professor at Illinois Institute of Technology (IIT), Chicago, and co-founder and Manager of TruNav LLC

**Terry Lamprecht**, Director of Products, AutonomouStuff

The webinar moderator will be **Demoz Gebre-Egziabher**, Professor, Aerospace Engineering & Mechanics, University of Minnesota

During the live event, audience members will have the opportunity to pose their own questions to the panel of experts, featured below.

## REGISTER NOW AT

**https://register.gotowebinar.com/register/1238704696436627971**

PANELISTS

## Lance de Groot

*Senior Team Lead, Geomatics Software Safety Critical Systems, NovAtel*

Lance de Groot holds a B.Sc. and M.Sc. in Geomatics Engineering from the University of Calgary. He joined NovAtel, part of Hexagon's Positioning Intelligence division, in 2008. During his tenure, he's worked on many cutting-edge technology projects including developing algorithms for ground reference receivers used in SBAS networks, high precision positioning and relative alignment algorithms for commercial applications. His current focus is developing safety-critical software for autonomous applications.

---

## Samer Khanafseh

*Research Assistant Professor at Illinois Institute of Technology (IIT), Chicago, and co-founder and Manager of TruNav LLC*

Dr. Khanafseh is currently a research assistant professor at Illinois Institute of Technology (IIT), Chicago, and co-founder and Manager of TruNav LLC. He received his PhD degree in Aerospace Engineering at IIT in 2008. Dr. Khanafseh has been involved in several aviation applications such as Autonomous Airborne Refueling (AAR) of unmanned air vehicles, autonomous shipboard landing for the UCAS and JPALS programs and Ground Based Augmentation System (GBAS). His interests are focused on high accuracy and high integrity navigation algorithms for close proximity applications, cycle ambiguity resolution, high integrity applications, fault monitoring and robust estimation

techniques. He is an Associate Editor of *IEEE Transactions on Aerospace and Electronic Systems*, and was the recipient of the 2011 *Institute of Navigation Early Achievement Award* for his outstanding contributions to the integrity of carrier phase navigation systems.

---

## Terry Lamprecht

*Director of Products, AutonomouStuff*

Terry Lamprecht started with AutonomouStuff in 2014 as the company's first Applications Engineer. During his time with AStuff, he has gained experience working with different sensing technologies and has worked remotely with customers integrating and trouble-shooting autonomous systems. Terry is now AutonomouStuff's Director of Products. He has a BS in Mechanical Engineering from Bradley University.

---

## Demoz Gebre-Egziabher - *Moderator*

*Professor, Aerospace Engineering & Mechanics, University of Minnesota*

Demoz Gebre-Egziabher is on the faculty of aerospace engineering & mechanics department at the University of Minnesota-Twin Cities, USA where he teaches and conducts PNT-related research. His research deals with the use of GNSS in transportation applications and the design of multi-sensor navigation and attitude determination systems for aerospace vehicles. He holds a Ph.D in aeronautics & astronautics from Stanford University.

---