



# Connecting Rod

June 2010



Oregon SAE Newsletter

Volume 15 Issue 1

## Governing Board Meeting

**Where:** Room 1J, Daimler Trucks Corporate Building; 4747 N. Channel Ave. Portland, OR

**When:** Tuesday, June 15<sup>th</sup>; 4:30pm

**Important:** Non Daimler employees need to come early to fill out ITAR forms, Katie will meet you by the back door. Please arrive by 4:15pm or e-mail: [chair@oregonsae.org](mailto:chair@oregonsae.org) with arrival time.

## Friday Lunch Meeting

**What:** Full Electric Conversion and Long Term Maintenance of a Honda Insight

**Where:** Daimler Trucks North America Corporate Conference Center – Willamette East  
4555 N Channel Ave. Portland, OR 97217 [map](#)

**When:** Friday, June 25<sup>th</sup>, 2010; 11:45am – 1:00pm

**Cost:** \$8 with current SAE membership, \$9 non-members, \$4 for all students; free without food or drink- Please note “no food/drink” in your RSVP.

**RSVP:** Mike Dragulin ([Mihaildragulin@hotmail.com](mailto:Mihaildragulin@hotmail.com)), by June 23<sup>rd</sup> for an accurate headcount

## Evening Tech Meeting

**What:** Urban Robotics - 3D Mobile Mapping systems

**Where:** Daimler Trucks North America Corporate Conference Center [map](#)

**When:** June 16<sup>th</sup> 2010; 6:00pm – 9:00pm

**Cost:** \$7 SAE members, \$9 non-members, \$4 for all students; free without food or drink -please note “no food/drink” in your RSVP.

**RSVP:** Rebecca Bauman at: [Rebecca.Bauman@Daimler.com](mailto:Rebecca.Bauman@Daimler.com)

## News/Announcements

New governing board members elected for 2010-11 board year; see section officers below.

Interested in becoming more involved with Oregon SAE? Want to present to our section? E-mail [chair@oregonsae.org](mailto:chair@oregonsae.org) for more information.

Oregon SAE group on Facebook -

Click on [this link](#) or search for "Oregon SAE" in Facebook Groups to join!

## New Meeting Topics

Would you like to see a particular Lunch or Evening Tech meeting topic? Please send your ideas to [lunch@oregonsae.org](mailto:lunch@oregonsae.org) or [tech@oregonsae.org](mailto:tech@oregonsae.org)

## Section Officers, 2010-2011

Chair	Blake Kashiwagi	(503) 745-8986	<a href="mailto:chair@oregonsae.org">chair@oregonsae.org</a>
Vice Chair/Treasurer	Rebecca Bauman	(503) 745-2876	<a href="mailto:Treasurer@oregonsae.org">Treasurer@oregonsae.org</a>
Secretary	Katie Knudson	(503) 745-2004	<a href="mailto:Secretary@oregonsae.org">Secretary@oregonsae.org</a>
Tech Meeting Coordinator	Srija Pidaparthi/William Rossi	(503) 745-8299	<a href="mailto:Tech@oregonsae.org">Tech@oregonsae.org</a>
Lunch Meeting Coordinator	Jason Wilkening	(503) 745-9328	<a href="mailto:Lunch@oregonsae.org">Lunch@oregonsae.org</a>
VC Student Activities / Scholarship	David Heineman/ Mike Dragulin	(503) 307-7920	<a href="mailto:Students@oregonsae.org">Students@oregonsae.org</a>
VC Motorsports	Matthew Rogers	(503) 888-9243	<a href="mailto:Motorsports@oregonsae.org">Motorsports@oregonsae.org</a>
VC Membership / Company Rep	George Gvakharia	(503) 745-5975	<a href="mailto:CompanyRep@oregonsae.org">CompanyRep@oregonsae.org</a>
VC Investment Committee	Jason Wilkening	(503) 745-9328	<a href="mailto:Investment@oregonsae.org">Investment@oregonsae.org</a>
VC AWIM Activities	Suman Narayanan	(503) 745-2375	<a href="mailto:AWIM@oregonsae.org">AWIM@oregonsae.org</a>
Webmaster	Henry Janzen	(503) 745-5693	<a href="mailto:Webmaster@oregonsae.org">Webmaster@oregonsae.org</a>
Newsletter Editor	Katie Knudson	(503) 745-2004	<a href="mailto:Newsletter@oregonsae.org">Newsletter@oregonsae.org</a>



## Full Electric Conversion and Long Term Maintenance of a Honda Insight

**When:** Friday, June 25th, 2010; 11:45am – 1:00pm

**Where:** Daimler Trucks Corporate Conference Center – Willamette East [map](#)

**Cost:** \$8 SAE Members, \$9 non-members, \$4 for all students

**RSVP:** Mike Dragulin ([Mihaildragulin@hotmail.com](mailto:Mihaildragulin@hotmail.com)) by June 23<sup>rd</sup> for accurate food headcount.



Electric propulsion systems for automobiles are becoming increasingly attractive. Moore's Law of Battery Technology and improved efficiency of batteries have lowered construction costs and maintenance of electric vehicles, but electric vehicles present new challenges due to increased power demands on battery systems. Presentation will review conversion, driving, and continued maintenance of a fully electric converted Honda Insight over the last 7 years.

Speaker Gary Graunke is a past chairman of Oregon Electric Vehicle Association, a non-profit association promoting electric vehicle education and their safe construction and use. Gary currently drives an all-electric Honda Insight conversion and a plug-in hybrid Prius. Gary has worked in computer software for 43 years, and currently works as a research scientist in Intel Labs as a senior staff architect for cryptography. Gary is a member of the Association for Computing Machinery, the Institute of Electric and Electronic Engineers, and the International Association for Cryptographic Research, and holds over 30 issued patents.



## Urban Robotics

### Key Engineering Design Principles in Developing 3D Mobile (Aerial, Vehicular, Handheld) Mapping Systems

**When:** Wednesday, June 16, 6:00pm

**Where:** Daimler Corporate Conference Center  
(Behind the former Shenanigan's Restaurant)  
4555 N Channel Ave, Portland, OR [map](#)

**RSVP:** Rebecca Bauman at: [Rebecca.Bauman@Daimler.com](mailto:Rebecca.Bauman@Daimler.com)

**Cost:** Oregon SAE Members \$7, Non-members \$9, Students \$4

#### Summary

Urban Robotics provides mobile 3D mapping systems for the various commercial and military systems. This presentation addresses critical engineering decisions made in the design of a generic 3D image processing system built for a variety of manned and unmanned mobile platforms. Six underlying design mantras used by the engineering team will be presented alongside corresponding technical examples of practical application. They are:

1. COTS (Commercial Off-the-Shelf) whenever possible
2. Scalable, Open, Modular and Networked architectures
3. KISS -- Keep It Simple
4. Destroy Ivory Towers
5. Succeed by Failing
6. Assume all data is suspect and only an estimate

#### Speaker Bio

*Geoffrey Peters, Principal, Urban Robotics*

Mr. Peters is an engineer by trade, with a Masters Degree in Computer Science from Purdue University. He has a history of entrepreneurial leadership and innovative product design. His software engineering experience includes speech recognition systems, semantic computer vision algorithms, and heterogeneous distributed systems. Mr. Peters has managed teams and programs that include ethnographers, software and hardware engineers, and industrial designers. He holds 10 diverse patents with engineering interests ranging across wetware, mind-body software modeling, and cognitive data visualization.



## Volunteer Opportunities

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### Oregon SAE is in need of Volunteers to help run our section!

- Fill a governing board officer position from June 2010-May 2011, click the link to learn about officer duties/responsibilities: [OSAE Board Member Handbook](#)

If interested, please contact [chair@oregonsae.org](mailto:chair@oregonsae.org)

- We need members to help us with Technical meeting and Friday lunch meeting topics. Call a board member with your ideas. What do you want to learn about this year? Would you like the opportunity to present at an Oregon SAE meeting?

- Help re-establish the local AWIM committee for K – 12 student curriculum. Contact [AWIM@oregonsae.org](mailto:AWIM@oregonsae.org) for more information

- Provide comments/feedback to the governing board on how to better serve your needs via email to [chair@oregonsae.org](mailto:chair@oregonsae.org) or come see us at a board meeting.

We always encourage your participation in Oregon SAE. Being involved on the governing board for Oregon SAE is a great way to socialize and network on a professional level. We encourage you to become involved today!

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