

Upcoming Events:

Governing Board Meeting

- What:** A monthly meeting to discuss the management of the section
When: Tuesday, March 21st from 5:00 – 6:30 pm
Where: Buffalo Gap, [6835 SW Macadam Ave, Portland, OR 97219](#)

Lunch Meetings

- What:** The Current and Future State of Advanced and Additive Manufacturing
When: Friday March 17th, 2017
11:30 – Doors open, Lunch – order from Sidebar menu
12:00 – 1:00 Presentation
Where: [Sidebar – 3901 N. Williams Ave](#)
Cost: Free entrance, order lunch off Sidebar menu
RSVP: [Link to Eventbrite to register](#)

- What:** The Ecosystem for Engineering Design Applied to Formula SAE
When: Friday March 24th, 2017
11:30 – Doors open
12:00 – 1:00 Presentation
Where: DTNA Headquarters ([4555 N Channel Ave, Portland, OR 97217](#)) - Room E
Cost: \$10 / \$5 for students includes Subway lunch
RSVP: [Link to Eventbrite to register](#)

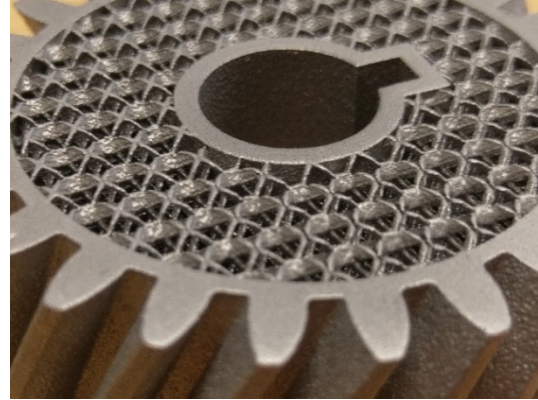
Evening Tech Meeting

- What:** The Nervous System of an Automated Driving Vehicle
When: Thursday, April 6th, 2017 – 6:00 pm
Where: PolySync, [1020 SE 11th Ave, Portland, OR 97214](#)
Details: This presentation covers the nature of, and requirements for, a fundamental sensor hardware and vehicle actuation abstraction layer for the next generation of the Software Defined Vehicle. The system requirements and overall cost for an ADV end up making the environmental data one of the most important and safety critical pieces. How that data is shared and made available to a redundant decision-making system are key factors in making this abstraction layer a requirement.
RSVP: [Link to Eventbrite to register](#)

Section Officers, 2016-2017

Chair	Erik Roe	(503) 794-3571
Vice Chair/Treasurer	Evan Placek	(503) 722-1200 ext 3098
Tech Meeting Coordinator	Kieran Lee	(503) 745-6460
Lunch Meeting Coordinator	Henry Janzen / Manjul Gupta	(503) 745-5693
VC Student Activities / Scholarship	Jason Wilkening / Aaron Rudick	(503) 745-9328
VC Investment Committee	Ryan Jefferis	(503) 745-8424
VC Communications & Webmaster	Nick Atanasov	(503) 745-8498
Newsletter Editor	Ryan Jefferis	(503) 745-8424

RAPID
made



The Current and Future State of Advanced and Additive Mfg.

Advanced and Additive Manufacturing (AM) has seen an explosion in investment, growth, and development in the last decade. For metals alone, AM means a shift from mold-based component concepts and the constraints that go with them to rapid iteration, development of ideas with full geometric freedom. Advantages include faster processing times, lower-cost components, and a level of design freedom that is so far unheard of. The main forces behind this momentum include the automotive, medical technology, and aerospace industries. Come hear a short presentation on the current and future state of this amazing technology.

Our Speaker:

Kristofer Beem- Business Development Director. Kristofer has a degree in Entrepreneurial Business and is one of the first four members of RapidMade, Inc. He has a combination of ten years of sales and marketing experience in B2B and B2C environments. His working knowledge of 3D printing and additive technologies enable him to quickly work with clients in a collaborative manner. In the past five years, he has built a strong client base of almost 400, including several Fortune 500 clients, and globally renowned brands.

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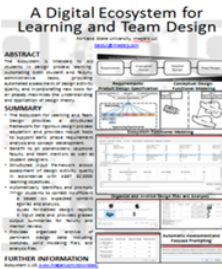
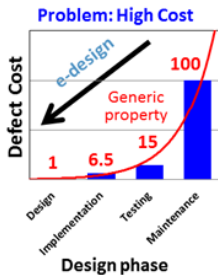
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Space is limited

Software for Early Identification of Design Oversights



"If a reliability problem is detected during engineering, the cost of the product goes up by factor of 10. If the problem is caught in production phase, the cost of the product increases by a factor of 100 or more."



Design decision support



SAE Oregon Lunch Meeting:

The Ecosystem for Engineering Design Applied to Formula SAE

Our speaker, Baldur Steingrimsson, holds the position of Research Assistant Professor in the Department of Mechanical and Materials Engineering of the Portland State University, OR. He is also the General Manager of Imagars LLC. Dr. Steingrimsson was awarded a Ph.D. degree in electrical and computer engineering from the University of Minnesota in 2001. His primary research interests and experience lie in the areas of signal processing, sensor systems, and engineering design.

"The Ecosystem for Engineering Design is developed herein as an immersive CAE tool for comprehensive design process support that facilitates the elimination of these sources of design inefficiency. In addition, the Ecosystem promotes rigid adherence to phase-appropriate design process activities increasing productivity." – 2017-01-1324 excerpt

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Online at: saeoregon.org and www.facebook.com/SAEOregon

WANTED SAE AND OTHER ENGINEERING SOCIETY PERIODICALS FOR DISTRIBUTION TO HIGH SCHOOL STUDENTS

World of Speed is a non-profit motorsports museum in Wilsonville, OR. A major mission focus is education through programs that include high school auto shop classes, an auto/technology related Explorer Scout group, and outreach to students interested in careers in engineering/technology.

As a docent, tour guide, and 50+ year member of SAE, I find that a lasting connection to an engineering or technical field is enhanced when the students walk away with something in their hands. I am asking the Oregon Section members to consider donating any back issues of AUTOMOTIVE ENGINEERING, AEROSPACE & DEFENSE TECHNOLOGY, MOMENTUM, TRUCK & OFF-HIGHWAY ENGINEERING, MOBILITY ENGINEERING plus any other engineering society related periodicals for distribution to students. Please contact me at vintagerace@verizon.net to work out the logistics.

Tom Styczynski

GD&T Seminar(s)

Class: Class Series (hyperlinks below):

Level 1 - GD&T Fundamentals Seminar, 2.5 days

March 6th - 8th 2017

GD&T Fundamentals

Level 2 - GD&T Applications Seminar, 2.5 days

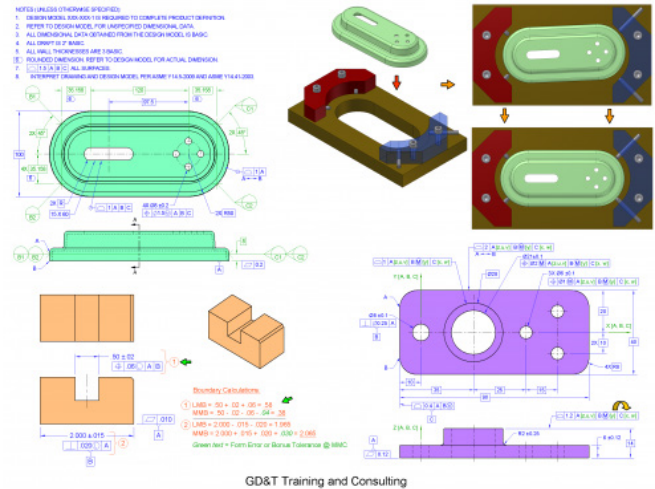
April 10th -12th 2017

Application of GD&T

Level 4 - Tolerance Analysis Seminar, 2.5 days

May 8th -10th 2017

Tolerance Analysis using GD&T



GD&T Training and Consulting

Instructor: Bryan R. Fischer of
Advanced Dimensional Management LLC (a division of Sigmatrix LLC)

Materials: All class materials included.

Level 1: **Level 1 - GD&T Fundamentals Seminar**
The Journeyman's Guide to GD&T, 2016
GD&T Updated Guide: ASME Y14.5-2009, 2014
Level 1 GD&T Course Exercise Sets and Handouts

Level 2: **Level 2 - GD&T Applications Seminar**
Level 2 GD&T – Adv Principles & Applications, 2010
Level 2 GD&T Course Exercise Sets and Handouts

Level 4: **Level 4 - Tolerance Analysis Seminar**
Mechanical Tolerance Stackup Analysis, 2nd Ed, 2011, CRC Press
Tolerance Stackup and Analysis Workbook GD&T & +/- Edition, 2005
Tolerance Analysis Exercise Set and Handouts

Sign Up Dates: Level 1: 3/1/17, Level 2: 4/5/17, Level 4: 5/3/17

Location: WARN Industries, Inc. - Donner Pass Conference Room: 12900 SE Capps, Clackamas, OR 97015

Time: 8:00 a.m. - 4:30 p.m. **Lunch included.**

Cost: *Special SAE OREGON Rates*

Level 1: \$995

Level 2: \$995

Level 4: \$1,095

Enjoy a 7% discount, sign up for all three for only \$2875!

Payment: OSAE Paypal in advance (see link below)

Questions: Contact Erik Roe, roee@warn.com, (503) 794-3571

[Registration Link](#)