## FEA Not To Miss News - Software & Engineering Solutions

Issue October 2020 www.feantm.com

#### **Oasys**



#### **BETA CAE**



#### **MSC.Software**



**Ozen Engineering** 



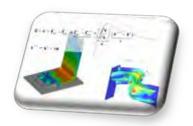
**ESI-Group** 



#### Altair



**DYNAmore Nordic** 



**Humanetics** 



Rescale



**AutoDesk** 



#### FEA Not To Miss (FEANTM) Profile

FEA Not to Miss comprises a group of interested parties sharing information. Information is presented on the website <a href="www.feantm.com">www.feantm.com</a> and this pdf publication.

This publication is no fee to receive.

#### Goal

Our goal is to share information on companies with expertise and innovative products. Strengths that rely on smart work ethics in today's changing world.

#### Compensation

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We believe in our effort to advance information on software products. We believe this constitutes a "fair use" of the material in accordance with Title 17 USC. Section 107."

#### Opt-Out

Any company may opt-out at any time by writing to Anthony <u>agiac99@aol.com</u>

After that, going forward from the email's receipt, the content will not include the company in any article.

Editors: (alpha order)

Anthony, Art, Marnie, Marsha, Suri, Yanhua

Contact us at: feaanswer@aol.com

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First - My use of the announcement page is a courtesy. Next month it will revert to the professional use.

October 13th is my 71st birthday.

Therefore, for October, I'm taking over the announcement page for ranch gossip! Let's all sing the Old Gray Mare She Ain't What She Used To Be.

The picture at the end of this explanation isn't clear since it was dark outside. For over a month, I've been leaving out cat food for the raccoon, and I wanted a picture.

SO, I go out with my camera and sit crosslegged on the driveway. I hear the crunching of twigs and the raccoon is coming so I could get a picture. THEN I see little beady eyes through my camera view. Not good!

I'm now stuck sitting across from a skunk who's looking at me like, "HEY, I'm a skunk, so don't scare me."

SO, I sat and sat, and he ate and ate, and finally he left. I go to uncurl my legs, and they are numb, and I am stuck! OUCH - OLD! The moral to this story is A) Make sure you know what animal will show up, AND if you're old, don't sit on the ground, unless you can nimbly jump up off the ground!



Notice those little eyes staring at me. I think if the skunk turned its tail at me, I'd have had to roll really fast up the driveway.

Notice I said I'd have to roll - my legs fell asleep, and no way could I get up to run!

Now, on to our Not To Miss Engineering Solutions news.



























www.d3view.com Contact: support@d3view.com





d3VIEW is a data to decision platform that provides out-of-the box data extraction, transformation and interactive visualizations.

With d3VIEW, you can manage simulations in a whole new way.

You can create, track, compare and share simulations seamlessly. With extensive extraction capabilities from templates, you can extract information from a variety of data formats using an intuitive web interface.

While the simulations are solving, you can monitor them, and interact with it using live preview. Critical information can be visualized as the solution is progressing.

You can perform DOEs, or run optimization using a single interface.

#### **Result Templates**

Templates help turn data into information. They help automate the process of extracting information from a raw simulation or experimental files.

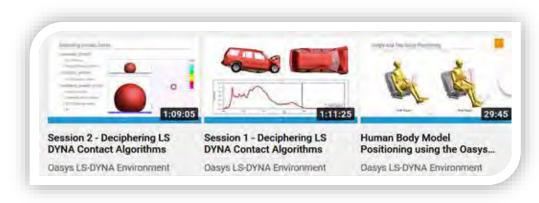
Built-in templates support extraction, transformation and storage of information with zero human intervention.

Templates are designed to extract from multiple parallel simulations and can scale to thousands of simulations at the same time.

#### **Oasys Website**



#### Not To Miss on YouTube





## <u>Tutorials Available to Download -</u> LS-DYNA PRIMER D3PLOT T/HIS REPORTER <u>Virtual Arup-delivered training courses.</u>

The sessions will run on Microsoft Teams. Timing for each will be from 9:30 AM - 12:30 PM (BST).

20,21, 22, and 27,28 Oct. Introduction to LS-DYNA

11 - 12 November - Oasys PRIMER: Seatbelt fitting and dummy positioning

#### **CADFEM Medical Conference Website**

#### **CADFEM Website**

**NOVEMBER 26th, 2020** 



CADFEM MEDICAL CONFERENCE 2020

The CADFEM Medical Conference is the specialist conference for the application of simulation in the field of

The Conference - It demonstrates lived practice and cross-divisional ideas and approaches in order to expand existing processes or process chains with the help of simulation, and to improve them in a sustainable way. The focus is on improved product safety, optimized therapies and diagnostic options, as well as simplified process flows in the area of development and approval.

The Target Group: The CADFEM Medical Conference is aimed at decision-makers and innovation drivers. It connects CEOs, project managers, product managers, regulatory affairs managers, engineers as well as doctors, research institutions, notified bodies, and health insurance companies. This creates a unique platform for ideas and the exciting discussion about the future of simulation in medicine and medical technology.

The Program: The conference will open with a keynote speech. Two subsequent sessions with keynote speeches deal with innovative product examples from the medical technology industry, supplemented bv contributions representatives of notified bodies and health insurance companies that deal with the subject of approval and reimbursement of simulationbased diagnosis and therapy procedures. The subsequent panel discussion looks ahead, and with a critical eye, at the main theme of the conference: "The central role of in silico medicine - what it can do and what we need for its practice."

**Speakers:** Experience exciting and equally stimulating contributions from our first-class speakers from many areas of the MedTech industry and take the opportunity to exchange ideas with them. The list of speakers is constantly being expanded.



Among the speakers will be Dr. Thierry Marshal Global Industry Director Healthcare, Consumer Product, Construction ANSYS

#### **ESI - Group Website**



# Andrea Gittens Innovation & Discovery Marketing Manager bei ESI Group



Here is another little movie about 4 'spacy' weeks with CAE solutions.

Star Trek, Aliens, Apollo 13, Gravity, Interstellar A well-known movie envisioning future in space. Scotti is ready to beam you up. Are you ready?

#### **Sheet Metal Forming Flyer - 26 September 2020 , Resource**



## Simulate sheet metal forming and assembly of components, like doors and closures

ESI PAM-STAMP offers innovative tools to help engineers eliminate uncertainties before entering the physical try-out phase and predicts the perceived quality after the assembly process of the full component. It spans from quick iterations on the part design, through forming process engineering to try-out validation and high-precision assembly of closure panels. All of that allows you to recognize and correct as-built distortion, surface quality, and/or gap- & flush in assembly.

#### **Altair Website**



#### <u>Developing Key Learnings with Our Own Data</u> Solutions

By Andrea Siudara on September 22, 2020

Since joining Altair in 2019, I've had the pleasure of teaming up with hard-working Altairians in all corners of the globe focused on the continuous improvement of the company. I am honored to collaborate with the most incredible engineers, scientists, and creative thinkers in the industry.

With Altair's acquisition of Datawatch in 2018, we gained both an intelligent suite of products and a team of dedicated data professionals who brought new ideas to the table. In January, CEO Jim Scapa wrote the blog post, "Streamlining Innovation by Drinking Our Own Champagne" to highlight a few of the ways we use our own products to improve our business. After all, how can we sell something we don't use ourselves?

Knowing we are always capable of improving our processes, my team and I were tasked with applying more of our technologies to help us further boost our self-awareness as it relates to both our internal people management efforts as well as externally with our customers. The goal was to let data tell us the story of what's working well, what could be better, and what needed to be changed.

#### Using data to understand who we are

As a fast-growing tech company with more than 3,000 employees worldwide, it's critical for us to have a clear understanding of what each Altairian brings to the organization, how each department and region is managing its team members, our diversity and inclusion efforts, plus the areas requiring additional focus and improvement.

Previously when all of this was evaluated by our local human resources (HR) teams, we found there were inconsistencies from region to region and department to department. So, we decided to utilize our own technologies to capture the various data inputs − like years of service, gender, promotions, headcount, and more − then conduct analysis using machine learning technologies. We employed Altair SmartSight™ and Altair® Knowledge Hub® to create an easy to understand snapshot of Altair's HR data to inform smarter, more consistent decision-making globally. The entire process took about two weeks from the initial point of pulling all the data to the final organized dashboards

.

#### **Altair Website**

SmartSight is self-service business а intelligence (BI) platform with a zero-footprint architecture deployable both on-premises and natively in the cloud. Users can connect to popular data sources, create dashboards, and embed analytics in an application. With an browser-based intuitive interface that transformation automates data tasks. the Knowledge Hub is market's only collaborative data preparation solution with no coding required.

We set up the dashboard to pull in new data from our HR system monthly and the entire upload process takes less than two minutes. The new data is integrated into the dashboard enabling our HR team to view company statistics in an easy to understand, user-friendly environment. These tools even have the capabilities to display data in real-time depending on how the data is collected.

For HR, this means understanding our story and how we want to write the next chapter. With this new insight, we are making better informed decisions to effectively manage our staff today while strategically planning for tomorrow.

#### Data that supports us

Altairians are the most critical part of our culture and our support team is a key component to the growth of both our customers and Altair. With a wide range of solutions to help propel our more than 11,000 customers worldwide in all industries, our global support team works around the clock to respond quickly and efficiently to customer requests. Whether it be troubleshooting issues or responding to requests for new product enhancements, the Altair support team takes great pride in serving as an extension of our customers' teams to help keep their business moving forward.

Over the years, our program managers and development teams have captured vast amounts of data associated with customer requests – like the average time it takes to respond to a ticket based on status issue types, new feature requests, and more – but lacked the ability to strategically analyze the data to see trends and identify any inefficiencies.

While the development ticketing system data was housed in a third-party project tracking software, SmartSight and Knowledge Hub were able to pull the data, perform verification on the data, and create an intuitive dashboard from millions of data points to give key program managers invaluable insight. This effort completely eliminated the need to manually pour over endless spreadsheets.

Today, the Altair program management team uses the dashboards to identify trends, detect inefficiencies faster, streamline our development process and address issues swiftly to ensure continued top-notch customer satisfaction. Even with all these subsurface moving parts, our customers continue to have a seamless experience.

#### **Altair Website**

#### Never waste valuable insight

Data has great potential for power in an organization, but so often sits unutilized. By using the right tools to seamlessly capture and strategically analyze data, companies of all types and sizes become better informed and inturn are enabled to make smarter business decisions propelling them to new heights.

Let us help you navigate the world of data analytics, so you can uncover key business trends, anomalies, and outliers hidden in your data.

To learn more about our data analytics and visualization tools, please visit our website.

#### Andrea Siudara



As chief information officer, Siudara leads Altair's global information technology team, overseeing the company's IT systems, enterprise business systems and IT business strategy globally.

With nearly 20 years of experience in leading large-scale, global IT organizations for major companies, Siudara was previously global director, sales and marketing IT for Ford Motor Company. She has an acknowledged track record of aligning IT with business goals to reduce complexity, accelerate growth, facilitate change,

and improve operations as evidenced in her previous roles at Delphi, Dell and General Motors.

Siudara holds a bachelor's degree from the University of Michigan and a master's degree in business administration from Michigan State University

#### **Humanetics**



Christopher O'Connor

President & CEO at Humanetics Group & Humanetics Innovative Solutions,

We are delighted to announce Mark Westen, current Managing Director of Humanetics Europe will expand his role as the new VP of Global Sales & Marketing, effective October 1st. Since Mark joined the group at the beginning of 2020, he has made a very positive contribution running the sales group across Europe, and synchronizing the various Humanetics divisions including passive safety, active safety and finite element services.

Mark will remain based in Europe servicing our global customers supported by his sales team in the US, China, Japan, India, Brazil and Australia. I am delighted that his proximity to our European and Asian customers will position us well to build on our current service and focus on these important regions. Welcome Mark - we look forward to your strategic insight and passion for the industry.



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#### **Humanetics**



## Apoorva Lakshminarayana

CAE Project Manager at Humanetics Innovative Solutions

#### NHTSA Announces Major Improvements to Child Passenger Safety

The U.S. Department of Transportation's National Highway Traffic Safety Administration today introduced a new crash test dummy and proposed new regulatory updates to improve the safety of child restraint systems. The announcement comes during Child Passenger Safety Week, September 20-26, 2020.

"Every child's life is precious, and the Department's work will save young lives," said U.S. Transportation Secretary Elaine L. Chao.

Known as the Q3s, the new crash test dummy represents a 3-year-old child and is the first child side impact dummy in federal regulations. It was specifically designed for testing child seats in side impact crash tests. This advanced dummy will provide more realistic data about the effect side impact crashes have on children. The agency's final rule on this new crash test dummy enables NHTSA to assess the safety of child seats in side crashes. Click here for the final rule

NHTSA is also proposing numerous upgrades to Federal Motor Vehicle Safety Standard (FMVSS) No. 213 Frontal Impact Tests for Child

Restraint Systems to make testing more representative of real-world child seat use in modern vehicles, including proposing to require that labels on child seats encourage that young children remain in rear-facing child seats until they outgrow the rear-facing height and weight limits of the seat. The Notice of Proposed Rulemaking also seeks comment on providing flexibilities for child seat labeling requirements that could better inform the public on the correct use of child restraint systems and allowing additional means for parents and caregivers to register their child seats to receive recall information. Click here to view the notice

In a separate NPRM, today NHTSA proposed to amend Appendix A-1 of FMVSS No. 208 to update the child restraint systems listed in the Appendix. The child seats listed in the Appendix are used by NHTSA to test air bag suppression or low-risk deployment systems in vehicles to ensure that they mitigate the risk of harm to children and infants. The Appendix was last updated in 2008, and many models are no longer available. Updating the list will make it easier for vehicle manufacturers and test laboratories to acquire newer testing seats.

Our engineering saves lives. Humanetics is the leading global designer, manufacturer and supplier of anthropomorphic test devices (ATDs or crash test dummies), simulation software models and calibration equipment.

#### **BETA CAE Website**

#### Not To Miss on YouTube Channel







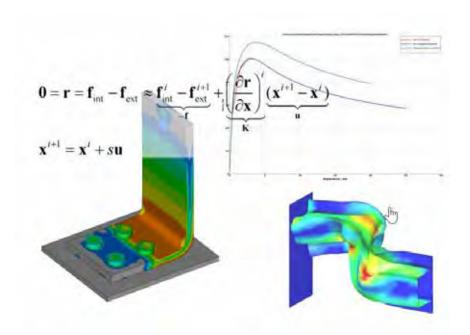
## **BETA CAE Systems YouTube Video Channel**

#### **DYNAmore Nordic AB Website**

There is now a new version of DYNAmore Nordic's Implicit Guideline available to DYNAmore customers! Just as the implicit capabilities of LS-DYNA are constantly increasing and improving we work continuously with improving the guideline. In this guideline we share our knowledge and experience about implicit LS-DYNA through advice and basic control card settings for different implicit

analysis types, this is also accompanied by some basic examples.

The guideline reduces the effort of getting started with implicit analysis in LS-DYNA has become an invaluable source of information to ensure convergence and "Normal Termination". Find the latest version at our file share platform, for DYNAmore customers only.



#### NOT TO MISS - DYNAmore Nordic Newsletter, Issue 54

- Reduced cost on Introduction to LS-DYNA Seminars 10/20-22 and 11/17-19
  - Webinar on the new LS-DYNA R12 October 29th
  - Prosicomp II research on composite process simulation

**DYNAmore Express - Your YouTube Channel for Learning** 

#### **Ozen Engineering Website**



# OEI helps to solve multidisciplinary engineering problems

**Electromagnetic Simulation** 

recent years, many electronic communication devices such as computers, smartphones, sensors. wearables. smart devices, and wireless communication devices have emerged in our life. They bring some engineering challenges, most particularly the increase in complexity of the products and their operating environment. The ever-increasing the communication speed and the rapid advancement of such devices have led to importance of electromagnetic behavior in product and system designs to meet stringent system requirements and guarantee the best product performance.

OEI is ANSYS channel partner and has been involved in a broad range of engineering simulations in industrial projects for years in Silicon Valley and Internationally. ANSYS Electromagnetic products help engineers model the electromagnetic effects of electronic and communication component or system in a rigorous manner. OEI provides consulting services for Electromagnetic simulations at different range of frequencies.

Here are some of the ANSYS tools that OEI uses:

 HFSS, Slwave, Q3D Extractor, Maxwell, Simplorer, Icepak, ANSYS Multiphysics

In particular, the following application areas of our expertise for Low & High Frequency Electromagnetic, but not limited to, can be highlighted:

- Electric Motors, Transformers, Inductors, Power Electronics, Magnet Design, Sensors
- Antennas for IoT, Electrically Small Antennas, Antennas for Large Platforms, Phased Array Antennas, Matching Networks, Radar Cross Section (RCS), Frequency Selective Surfaces (FSS)
- SI/PI, EMI/EMC, RF Shielding, Coupling, Near-Field&Far-Field, Packaging, Connectors
- Cavity Filters, Multi-band Filters, Couplers
- Biomedical/Health Applications: Exposure, SAR, Imaging, Biosensors
- High-Speed Electronic Circuit and System
- Multiphysics co-simulation-Thermal and Structural

<u>Please contact us to discuss your model or simulation requirements.</u>

#### **Autodesk Website**



<u>Coral Maker is Saving Coral Reefs With</u> Additive and Traditional Manufacturing

By: Emily Engle

When many people hear "coral reef," they picture a rainbow array of creatures coexisting on the ocean floor, snorkeling on vacation, and perhaps even the ever-optimistic Finding Nemo. However, the stark reality is that because of climate change, many of the Earth's reefs are starting to look more like uninhabited ghost

towns due to a process called coral bleaching. Coral bleaching occurs when warming ocean temperatures affect a coral's biology, causing it to go into a high state of stress and turn white, eventually dying altogether.



Sure, this monochrome display has its own unique, spooky beauty to it, but it certainly isn't healthy for our planet. "Coral reefs are incredibly biodiverse and important ecologically," explains Taryn Foster, Founder of Coral Maker. "Their structure also protects our coastlines, providing a barrier to storms and coastal erosion."

Coral Maker is an Australian company that is taking a new, accelerated approach to restoring coral reefs. Foster, a coral biologist and avid diver, began to think about how she could use her research background to actively restore reefs when she started to connect the dots between her scientific experience and her family

business. Her family works in the masonry manufacturing industry, and they own machinery that makes limestone blocks and other products for the construction industry. Then came the lightbulb moment: what if these machines could be used to rapidly make safe skeletons for corals to inhabit?

#### **Autodesk Website**



Through a Fulbright Fellowship at the California Academy of Sciences, Foster moved to San Francisco. She then applied to the Autodesk Technology Center's residency program at Pier 9 in San Francisco in hopes that she could pursue this idea further. Once accepted, Foster hit the ground running, working with a team of Autodesk support members through the Autodesk Foundation from various backgrounds like robotics, manufacturing, and architecture.



The team designed and modeled the actual coral component in Fusion 360. "We're working across four vastly different time zones, so Fusion 360's cloud platform has enabled us to collaborate on the same designs and access the same data," explains Robert Bowerman, Technical Consultant at Autodesk. "A lot of the work we've done has been making conceptual models, 3D printing prototypes and making videos so that Taryn can simply go out and tell people about this problem and the solutions that we're coming out with."

The typical coral restoration process involves cutting a little piece of live coral from an existing colony, then allowing that piece to grow its own skeleton and eventually grow into a bigger colony. The issue with this process is time—coral naturally grows very slowly (think 3-10 years before a piece grows its own adult-sized skeleton). In order to speed up the process, Coral Maker provides these tiny coral pieces with premade calcium carbonate skeletons.

Once the skeleton CAD was complete, the team employed 3D printing to quickly create prototypes before manufacturing. "To actually make a real impact, you need to be planting millions of corals each year," explains Bowerman. And that's exactly what Coral Maker's process is capable of doing through a mixture of additive and traditional manufacturing techniques.

#### **Autodesk Website**



One of the most interesting aspects of Coral Maker's process is that the Foster family's machinery is pretty standard—it's a traditional brick making machine that is available all around the world. This means that, unlike previous processes, Coral Maker's process can be deployed anywhere facing coral bleaching, such as the Philippines or Indonesia.

"We really considered how we could apply traditional manufacturing techniques or automation to try and achieve that scale," says Bowerman. "My input has been around designing the product so that it's suitable for the process but also giving advice on how we can design the tooling to actually make this product using the dry cast molding machine. I tried to apply what I know from industries that do achieve scale, like the automotive industry, and apply it to this problem that has never been solved before."



"Dry cast molding allows the mold to be reused seconds after the last product came out, whereas, with wet cast molding, the cast has to sit in the mold, usually overnight, before you can take it out, which slows down the process considerably," explains Foster.

What's next for Coral Maker? They're currently working on a robotic system that will automate the process of planting live corals in the skeletons. They're hoping other parts of the industry will be able to scale up as well. "Our next bottlenecks are going to be around scaling the supply of live coral, as well as scaling deployment to the reef," Foster notes. "So there are other problems to solve, but this is about

solving one problem that will make it possible for other parts of the industry to scale what they're doing."

Keep up with Coral Maker's journey over on their website or social media, and download Fusion 360 today to see how it can improve your workflow.

#### **MSC.Software Website/**

### MSC.Software YouTube Channel - Video - Webinars - Updates





#### Article that Christina does not want you to miss



## Christina Capasso Jamerson

Field Marketing Manager - Enterprise Accounts at Ansys, Inc.

The first all-electric airplane race series is coming in 2021 and teams are already preparing by using simulation to solve some of their biggest engineering challenges.



Ready for Take Off: Simulation Charges Electric Air Racing

Author: Robert Harwood

Air Race E is the first all-electric airplane race series. With the launch of the series scheduled for the second half of 2021, the competing teams are striving to engineer the aircraft that will take part in this revolutionary form of air racing — with eight fully electric planes completing eight laps of a 5 km (3.1 mile) circuit, wing tip to wing tip, at speeds of up to 450 kph (280 mph).

In addition to being an amazing spectacle, the race series will serve as a testbed for new technologies that will shape the future of more sustainable aviation. Electric systems are

augmenting fossil fuel-based propulsion systems and may even replace them. Airbus is a founding partner of Air Race E, which reinforces commercialization and industry adoption, much the same way as the automotive industry's Formula E develops electric vehicle technologies that are adopted in everyday automobiles.

Engineering Electric Planes

With just over a year to go, the serious business of engineering these groundbreaking aircraft is underway.

#### Article that Christina does not want you to miss



The series has been designed to focus the teams on developing solutions to some of the most pressing electrification challenges, such as energy storage and batteries, power electronics, electric drives, charging and lightweighting.

The teams face stiff design criteria: 150 kW power (with +175 kW boost), 800 V maximum, delivering full power for 5 minutes with a 10-minute reserve at 30% power. And all this must be delivered by a powertrain with a mass of no more than 155 kg (341.71 lb).

Recognizing that simulation is the only practical way to get these aircraft to the start line in time for the first race, Air Race E has partnered with Ansys to enable the competing teams to access the portfolio of simulation tools they need — from systems and embedded software to electromagnetics, fluids and mechanical.

"Lacking historical design precedent for these highly sophisticated electric aircraft, simulation remains the only way to safely develop innovative technologies under incredibly tight deadlines," said Jeff Zaltman, founder and CEO, Air Race Events. "Partnering with Ansys, Air Race E teams will leverage leading-edge simulation technology to design new aircraft, achieve world-class performance levels and cross the finish line at incredible speeds. These advances will help usher in the next chapter of electric aviation."

#### **Solve Electric Plane Engineering Challenges with Simulation**



So just how are the teams planning to solve these challenges with simulation? To go under the hood and explain some of the details, Ansys and Air Race E have teamed up with IQPC and their More Electric Aircraft series to present a free-to-attend, live webinar on September 22 at 8 a.m. Eastern US/2 p.m. Central European time. Reserve your spot by registering to attend here.

#### Article that Christina does not want you to miss

Tune into the webinar to hear Air Race E CEO Jeff Zaltman introduce the race series and the associated engineering challenges. Ansys engineers will describe how simulation is being deployed across the teams to deliver practical solutions to these challenges. The speakers will use examples derived from the race teams' active projects.

And if you can't wait until then, get a sneak peak of Ansys electrification solutions by

downloading our new electrification e-book, "Engineering What's Ahead: Electric Mobility."

#### The Race to Electric Mobility Ansys E-book



About the Author: Robert Harwood

Global Industry Director Rob obtained his engineering PhD in 1998 and since that time has focused on the industrial use of simulation based engineering in a broad range of industry sectors. Rob has been with Ansys for 16 years.

Editor: Art Shapiro About Art (pdf)



Hidden Women: The Art of WWI Camouflage (Photos) - July 19, 2016 by richardgreen

When the United States entered World War I in 1917, both men and women helped out in the war effort. Women worked in factories, joined the Red Cross, and participated in a number of military organizations. In New York City, a group of female art students joined the National League for Women's Service and trained to serve in the Camouflage Department of the United States Navy.

Picture: A Living Rock. Women's Camouflage Reserve Corps, of the National League for Women's Service.



You Can't Hurry Love...or Vaccine Trials - Why Our Covid Vaccine Trials Can't Be Rushed

Robin Schoenthaler, MD - Radiation Oncologist at Massachusetts General Hospital/Emerson Hospital. Writer. Teller. Mom. Currently Covid-Obsessed.

There are many things you cannot hurry along. Not a toddler, not an uphill biker, not a love affair, and definitely not a vaccine trial.

There are three Phase 3 vaccine trials going on in the US and over a dozen around the world. Phase 3 trials are the gold standard of clinical research — randomized clinical trials — and if they show the vaccine is effective and safe they are the last step before "approval" or licensing by the FDA. Effective and safe are the key words here.

All of these vaccines already went through Phase 1/2 trials where they showed their

product appeared to be effective (people made antibodies) and safe (some fever, achy muscles, sore arms, but nothing catastrophic).

So once they finished those successful Phase 1/2 trials with small numbers of patients, they have now proceeded to three big Phase 3 trials in the US, each aiming to get about 30,000 patients. So that's 90,000 people we need to volunteer.

For the Complete Article please visit You Can't Hurry Love...or Vaccine Trials - Why Our Covid Vaccine Trials Can't Be Rushed

#### **Rescale Website**



Rescale and Hyundai Motor Group
Collaborate to Accelerate Mobility
Innovation by Building a Multi-Cloud High
Performance Computing Environment

San Francisco, September 23, 2020 — Rescale Inc., the leader in enterprise big compute, in cooperation with Hyundai Motors Group, today announced that they are building a multi-cloud high performance computing (HPC) environment for innovating in the smart mobility industry. This new agile environment will allow researchers to expand capacity via the cloud and break through the physical limitations of traditional research and development.

"Close collaboration between IT and the field is essential for Hyundai Motor's digital transformation strategy," said JungSik Suh, Senior Vice President and Head of ICT Division of Hyundai Motor Group. "We are pleased that the Rescale cloud platform will be the venue for this collaboration, and expect it to increase research efficiency by moving away from the physical limitations of a static on-premise environment."

Adding more cloud capacity and power to high performance computing allows mobility researchers to run critical digital simulations with faster iterations, enabling more rapid technological breakthroughs such as the development of Al-powered autonomous vehicles or enhancing automotive fuel efficiency and safety features. The Rescale turnkey

platform makes it possible to easily run hundreds of simulation software on a multicloud high performance computing infrastructure, allowing researchers to scale and accelerate research as needed on a single platform, accessible at anytime and anywhere.

Until now, the Hyundai Motor Group Research Institute's Aerodynamic Development Team was restricted by the resources of an existing on-premise infrastructure, limiting the number of simulation tasks that could be processed simultaneously. By moving to a customized multi-cloud environment powered by Rescale, Hyundai Motor Group researchers will be able to scale simulations according to need, allowing significantly more tasks to run simultaneously with optimized team collaboration, and ultimately leading to a faster time to market.

"As an intelligent control plane for big compute, Rescale enables researchers to collaborate seamlessly, and ensures simulation workloads always run on the most performant architectures from our multi-cloud provider infrastructure network." said Edward Hsu VP of Product at Rescale. "We are pleased to be working with Hyundai Motor Group to drive unprecedented mobility innovation."

Section Editor: Yanhua

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	N. Matsuura -  Development of Simple Connection Model for Plastic Parts in Low-Speed  Crash Simulation

## Section Editor: Yanhua

That pood at some based  The some analysis of the some some some some some some some som	09/28/2020 - <b>Juliano Mologni</b> - ANSYS - <u>EMI/EMC Workflows in Ansys HFSS</u>
ANSA  Totorial Seatbett Tool Enhancements	09/21/2020 - BETA CAE Systems <u>Enhancements of the seatbelt tool.</u>
	09/14/2020 - <b>Kaizenat</b> <u>Model Editing using LS-PrePost</u>
VACATION	09/07/2020
How to run an LS Oyna job on Rescale	08/31/2020  How to Accelerate Crash Analysis on Rescale with Ansys LS-Dyna
Extracting tentian forces  + state of same invasion  + state of same i	08/24/2020 - <b>Maruthi Kotti</b> Session 2 - <u>Deciphering LS-DYNA Contact Algorithms</u>

Section Editor: Marsha

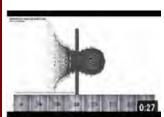
SERIES SAS	09/21/2020 - CADFEM - <u>ITficient and CADFEM presents the new service of a valve manufacturer for oil &amp; gas conveyors</u>
	09/14/2020 -  Material Competence Center offers the entire engineering service from a single source up to the delivery of a material card.
Dynaform Die System Simulation Solution Using LS-DYNA eta	09/06/2020 - <u>Dynaform Overview Die Sumulation Solution</u>
	08/31/2020 - <u>Vantablack Optical Simulation: From Space to the Road</u> by G. Moysan, Guest Blogger M. Stellmacher.
1010100101010 01010100010 11110001 10001111	08/17/2020 - L. grasty shared by Jon Aldred - <u>Data Lake or Data Landfill</u>
LS DYNA  LS PREPER  LS OFF  LS OFF  LSTC  COMMERCE CARRIERS  Thums	08/10/2020 - <u>Kaizenat</u> Apps for engineers
	08/03/2020 - ESI - Caroline Borot - <u>Aircraft Interior Design Just Got More Challenging</u>

Section Editor: Marsha



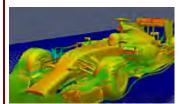
09/28/2020 - Today we'll have a new coffee flavor. I call it the O'Connor with Hazelnut, OR you can even have a dash of Chocolate. Humanetics is a company you shouldn't miss.

**Chris O'Connor - We are Humanetics** 



09/21/2020 -OH NO! nothing worse than an upset Senior Citizen (yes, that would be me) throwing her coffee cup with coffee in it at the weeds with Hypervelocity Impact. AND all it did was water the weeds with coffee and probably make them grow faster - now I have to make myself another cup! Grrrrrr - so dumb throwing good coffee. Maybe it wasn't Hypervelocity but it felt like it.

Ameen Topa - <u>Hypervelocity Impact of Aluminium sphere against aluminium plate.</u>



09/14/2020 - Yes, I know I had the below simulation showcased last year but I really like it. Gotta love a Ferrari, although on this ranch it would not be useful - WAIT, I can race the horses and win!

<u>Simulation of the F1 Ferrari</u> Simulation and you can obtain the input deck.



09/07/2020 - See below for my new delivery type of motorcyle! NOT! I rather deliver riding a horse over that road break! NOT! My 3-speed bicycle (It's so old that it only has 3 speeds - (my blue Denault English Racer) Anyway, I will deliver in my Ford Sport Trac the Coffee A La Speed Bump!

<u>Simulación Motocicleta LS-DYNA -</u> Analysis of the motorcycle beater when passing through a speed break at a speed of 10 km / h.



Coffee & Gossip By Marsha & Molly



09/28/2020 - I am not fond of this owl. It doesn't hoot; it screeches. Plus, it is on my roof, or my porch - What does it think "MY SPACE - YOUR SPACE" means! The owl is too silent - OH WAIT - until it screeches and scares the heck out of me!



09/21/2020 - I explained to Baby Vulture my space is here, and over there is vulture space. He didn't move, so I did - then he just hopped over to the horse water trough and had a drink, and then let me have my space back. It just proves my area is their area. I have to figure a better explanation method!



09/14/2020 - I can tell you that is NOT what a horse leg is supposed to look like. I have NO clue what the horse did, but the entire lower portion of the leg was 2x as big as the other one. The good news is that it's finally getting smaller. I'm wrapping it in Epsom salt gel poultices, and, of course, he's getting anti-inflammatory medicine.

## FEANTM - October - C&G coffee & gossip



09/07/2020 - Breath in that fresh country air! NOT! Told you about the fire and this is the smoke rolling in over the next pastures! We were on "Warning" Evacuation but luckily we didn't get "Mandatory" Evacuation. Really stressful week - I was drinking coffee by the gallon jug not even a cup!

08/10/2020 - Okay, I have to admit I love my Raven family that lives here. They are such great parents - They groom the baby who is almost as big as them and still feed it, but it also eats on its own (I think). They love cat food, so I always put out some dry cat food and one can of food a night. Yes, only on small can since they can go find food! BUT, in case they don't, they have a backup with the rest of the birds.







08/03/2020 - WHY can't the bobcat take her kids to another location! Now the baby sits where Mom used to sit and watches me having coffee! Mom is more orange, so I guess the baby takes after his wandering Dad.



07/27/2020 - Do you know what it's like having coffee and the owl lands on the porch post, next to you? Then the owl looks at you like, "HEY, stopping to catch a lizard. You can just drink your coffee and ignore me." So, I ignored owl and drank my coffee and took a picture. Sure enough he started staring at something on the ground and jumped down off the porch onto the ground, then flew back to their nest. The scary thing I find with the owl is that I can't hear him at all. Like silent flying! Also I can't seem to get my ferals to respect my territory, their territory. It's like they all say, "Hey, Gramma, we need to borrow your space! Go drink coffee."



07/20/2020 - Owl Baby time! Or course Owl Baby has to sit above the bobcat play cavaletti's SO, we moved the play rails down a couple of yards. Then I was worried Mom Bobcat would catch it while it was asleep so I took my coffee and sat out there an hour until it flew up to the nest. AND look at those feet - it is going to be a big owl!

07/06/2020 - Great, now I get to worry about baby bobcats. They are next to our house in a large garden area - They play, Mom stalks, they all catch things. I am beginning to feel like one big dysfunctional feral family. Not the best focused pictures but I stay on my side - they stay on theirs.

**Baby** 



Mom Stalking Me



Mom sitting while I have coffee



# Cuisine by Corrado Tumminelli

# CORRADOT

PROVANDO E RIPROVANDO ....



The Recipe PDF is available on the FEANTM Website

**RECIPE PDF** 







