



Welcome

**Catalina Tech Conference
and Expo**

May 19, 2026, 8 am

Mike Brisbois, PE

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Speaker Line up

Dr. Hamani Saini
Pamela Hamblin
Clément Cid
Subramanian Lyer
Brandi Sanders
Roger Millar
Darryl Palmer
Mike Brisbois, PE
Max Banakar
Rupesh Kutte
Emmanuel Akpan
Bryan Clay
Gary Gluck
Heba Ramzy
Karim Dasuki
Cody Nowak
Stephen Kane
Renee Schneider
Donna Fluss
Ismar Enriquez, AIA
Nihar Trivedi
Evan Walls
John Drayton
Johnathan Humphries
Jonathan Reichental, Ph.D
M. Hanan Daudpota
Michael Loggins, CSM
Shahid Jamil
James Riley
Pat Hohl, PE
Collin McGee
Lucretia Lee Arceneaux
John Gomes, Jr. CCT
Hal (Harold) Herrington
Justin Darnall
Mithil Bangera
Aparna PN
Cameron Aljilani
Karen Cahn
Breeja Larson, OLY
Mehernosh Pithawalla
Anand Prakash Arya
Daniel Salinas
Esteve Mede, CEO
Keerthi Vadhani Malarvannan
Andrew Bui
Eltijani (Osman) Elrayah
Jennifer Winestorfer
Josh Elvander

Improving Electric Vehicle Battery Lifespan with Active Cell Balancing

As the automotive industry transitions from fossil fuels to electric mobility, improving the efficiency, safety, and reliability of lithium-ion battery systems has become increasingly important. Electric vehicle battery packs consist of multiple cells connected in series and parallel, making uniform cell operation critical for optimal performance and longevity. Due to chemical and operational variations, differences in cell voltage and capacity naturally arise, leading to uneven charging and discharging that reduces usable energy and overall efficiency. This presentation explores the significance of active cell balancing, where battery monitoring systems and control algorithms redistribute energy from higher-voltage cells to lower-voltage cells to maintain voltage uniformity. By ensuring all cells operate at similar levels, active balancing improves energy utilization, reduces stress on individual cells, extends battery life, and enhances the overall performance and reliability of EV battery packs.



Keerthi Vadhani Malarvannan, recently graduated with a master's degree in electrical engineering, with thesis research focused on **"Active Cell Balancing in Lithium-Ion Batteries"**. I have worked as an Embedded Engineer at Caterpillar, contributing to machine software development at the application layer. I completed my bachelor's degree in electrical and Electronics Engineering through a sandwich program in 2022. My technical interests include battery management systems, embedded systems, and electric vehicle energy storage technologies.

Keerthi Vadhani Malarvannan

<https://www.linkedin.com/in/keerthivadhani/>

12:00 pm Jen Calling Guest Speaker – Health and Fitness Lunch Keynote

In a world driven by constant connectivity, innovation, and performance metrics, the greatest system often neglected is the human body. Chronic stress, poor sleep, low energy, and disconnection from our physical selves quietly erode focus, creativity, and leadership capacity, especially in high-pressure tech environments. True optimization doesn't come from working harder, but from learning how to regulate energy, build resilience, and create a body that supports clarity, confidence, and longevity. When leaders prioritize health from the inside out, they don't just perform better, they lead better, think clearer, and sustain success without burnout.



Jennifer Winestorfer

Jennifer Winestorfer is a master personal trainer, health and nutrition coach, transformation specialist, and motivational speaker with over two decades of experience helping high-performing individuals reclaim their strength, energy, and confidence. A former competitive gymnast, Ironman World Championship triathlete, and physique competitor, Jennifer blends elite performance principles with deep mindset work to create lasting, sustainable transformation. As the founder of Inside Out Enterprises, LLC dba Jen Calling: Personal Training & Health Coaching, she specializes in helping driven professionals break free from burnout, reconnect with their bodies, and lead powerful lives from a place of self-respect, resilience, and vitality.

<https://www.linkedin.com/in/jencalling/>

08:30 am Josh Elvander, Trends in Advanced Aviation, VP Operations, Aergility

The talk will describe the prospects for significant advances in new aviation technologies, namely eVTOLs and drones. This will be a very top-level discussion of the technical, societal, governmental, and regulatory opportunities and challenges, noting that the last two items are not necessarily synonymous. Josh's perspective will be solely his own, having worked in flying cars, eVTOLs and now drones.



Josh Elvander

Josh Elvander, VP-Operations, Aergility

Josh has 25 years of experience in a variety of roles in aerospace and robotics engineering. Josh is currently serving as VP-Operations at Aergility, and consulting at MagLev Aero, where he was the VP-Engineering for four years. Before joining MagLev, Josh was the VP of Engineering at Terrafugia, where he led the successful effort to obtain FAA Light Sport Aircraft certification for the Transition® roadable aircraft. Other career highlights include several years at General Dynamics-Bluefin Robotics, where, among other accomplishments, he led the development of an autonomous underwater vehicle used in subsea searches for Amelia Earhart's Lockheed Electra and Malaysia Airlines Flight MH370. Josh began his career at Boeing-Rocketdyne Propulsion and Power developing advanced hypersonic airbreathing engines. He holds a B.S. in aerospace engineering from the University of Maryland and an M.S. in aeronautics and astronautics from the University of Washington.

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Thank You!

for joining us in

Catalina Island

**We look forward to seeing you next time at our
Coeur d'Alene Tech Conference and Expo**