

Mechanical and Aerospace Engineering Seminar

Joshua Poertner

President and Owner of SILCA brand of cycling tools and accessories as well as the President and owner of cycling consultancy Aeromind LLC

Will present a talk titled:

We're Probably Doing this Wrong: Using Marginal Gains thinking to reframe problems, improve models, and gain technical advantage

Abstract:

Every modern industry, product category, or sporting endeavor you can imagine has been built upon generations of improvement and advancement which creates a strong conventional wisdom of what 'works' and what doesn't. As these developments have most likely come in relatively linearly and by experimentation, we find that large percentages of this conventional wisdom is often wrong, or at the least is quite often incomplete.

Josh will use stories from his career and experiences to talk about how reframing problems, fixing incomplete models, and breaking through psychological roadblocks with athletes can unlock new opportunities for performance gains. Josh will also talk about tools and thought experiments that he uses with his team to help crack some of these problems while looking at real life examples where significant change has been achieved.

Date: April 29, 2022

Location: CAMP 176

Time: 11:00 am

ZOOM Link for virtual attendance

<https://clarkson.zoom.us/j/94333678632?pwd=b25DRlY3STRkak9iNGFmMUY1UjNPZz09>

Meeting ID: 943 3367 8632

Passcode: 743721

One tap mobile

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Bio: Josh is the President and Owner of the historic SILCA brand of cycling tools and accessories as well as the President and owner of cycling consultancy Aeromind LLC which specializes in high performance product development for professional teams and athletes.

Josh fell in love with cycling and the technology around the sport as a teenager and was fortunate to have a career racing bicycles around the world before receiving a bachelors in Mechanical Engineering. His work as Technical Director of Zipp Wheels is widely considered to have changed much of the thinking around the design of modern racing bicycles and his experiences transforming this sport have led to consulting work ranging from auto racing, to military, to equipment used in nearly a dozen Olympic sports.

Winner of more than 50 industry product, design, and technology awards Josh was also voted the Chairman of Cycling Technology Working Group at the World Federation of Sporting Goods Industries three times, and has even won the coveted Innovation Excellence award for Advancements Supercomputing from the ACM/IEEE.