

Rhino User Webinar: The Vivobarefoot BIOME project

WHERE: University of Michigan

WHEN: March 12th, 2025, 4:00PM CET

The Vivobarefoot BIOME project tackles the limitations of traditional shoe manufacturing by democratizing algorithmic inputs for both customers and designers. Using computational systems, the team developed a foot-centric workflow that converts Signed Distance Fields (SDF) into machine code for robotics and automated slicing. This streamlines production into scalable, efficient pipelines.

Partnerships with Volumental and ShapeDiver integrate advanced scanning and computational tools with [Rhino](#) and [Grasshopper](#), creating sustainable, bespoke footwear solutions that balance design, material science, and hardware constraints.

Speaker: Peter Davis is a self-confessed computational nerd who has worked with artists, companies, and research institutes to bring innovative visions to life, from public space installations to custom products driven by client data.

After finishing his career as a professional breakdancer and selling his first company specializing in urban entertainment, Peter transitioned to a new creative industry. This led to co-founding a second company focused on computational design, 3D printing, AR/VR, and visualizations. ECCO eventually acquired the company to launch an innovation lab to revolutionize leather and shoe production. This career path has pushed Peter to explore 3D design, robotics, Industry 4.0 manufacturing, and even jet packs.

Now, Peter is automating bespoke products through AI-driven engineering. Products, structures, and entire machines are designed using computer algorithms and mass-produced in digital factories with industrial 3D printing. These objects are more advanced, efficient, and sustainable than traditional ones. [Register now!](#)

Links:

[Vivobarefoot BIOME PR Briefing](#)

[Fast Company – World Changing Ideas 2024](#)