Robotics Seminar Series

# Building Material Intelligence

Dr. Dylan Wood
Assistant Professor of Architecture
Univerity of Oregon

Dylan Wood is an Assistant Professor of Architecture at the University of Oregon, with a focus on material integration with computational design and advanced manufacturing. His interdisciplinary design research and teaching centers on developing intelligent approaches for utilizing ecological resources in new forms of architecture and building construction. These methods explore how computational design enables simple, material effective construction as well as novel geometries and functionality. He is the co-founder of hylo tech, a spin-off company pioneering methods of hygromorphic manufacturing and timber fabrication strategies. In Oregon Dylan works closely with the Tall Wood Design Institute, OSU Wood Science and Engineering and the College of Engineering as an expert in developing digital approaches for timber fabrication, products, processes and systems.

From 2019-2023 Dylan, led the Material Programming Research Group at the Institute for Computational Design and has practiced as a designer and digital fabrication expert at Barkow Leibinger Architects in Berlin and DOSU Studio Architecture in Los Angeles. His doctoral research on self-shaping wood manufacturing was conducted in collaboration with ETH Zurich and jointly funded by the Swiss Innovation Agency (InnoSussie), the German Federal Environmental foundation (DBU), and GETTYLAB. His research and design contributions at the University of Stuttgart lead to full scale building technology demonstrators including the Urbach Tower, Wangen Tower, HygroShell, and the LivMats Biomimetic Shell.

His talk – Building Material Intelligence - will explore the relationship between building materials and robotics as methods of constructing and shaping physical form through a series of experiments, building demonstrators, and student projects. The talk will bring together design, science, and engineering around the aim of developing fresh approaches for constructing a more sustainable built environment!

FRIDAY
Jan 24
10-11AM

Rogers Hall 230
FREE
Refreshments Served

OSU Robotics
robotics.oregonstate.edu

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