Software Seminar Series

Sharing information about the practices, methodologies, and tools for improving software quality

ROSMOD: A Domain Specific Tool-suite for Distributed Cyber Physical Systems

William Emfinger, Ph.D

Wednesday, May 31, 2017
12:00 pm – 1:00 pm
180-101

The Robot Operating System (ROS) MODeling, development, and deployment framework (ROSMOD) is an open source tool-suite for the design of distributed embedded systems. The tool suite includes a component model, modeling language, graphical user interface, code generators, and a deployment infrastructure. This talk will discuss the applications of ROSMOD to small spacecraft, current limitations, and future directions. Two real-world case studies from the NASA Student Launch competition will demonstrate practical applications of ROSMOD.

William Emfinger earned his Ph.D. in Electrical Engineering from Vanderbilt University. He is currently Adjunct Assistant Professor of Mechanical Engineering at the Vanderbilt Aerospace Design Lab (VADL) and is Chief Technology Officer at Max Mobility, LLC. At VADL, he mentors undergraduate and graduate students to develop real-time flight-proven control systems and ground-based test facilities built with ROSMOD.

Jointly sponsored by the *JPL Center for Academic Partnerships*, the *Small Scale Flight Software Group* (348C), and *SQI*.

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