Exponent®
Engineering & Scientific Consulting

Dan Panno

Associate | Vehicle Engineering
Phoenix
+1-623-587-6777 | dpanno@exponent.com

Professional Profile

Mr. Daniel Panno is an associate in the vehicle engineering practice and has expertise in electric vehicle (EV) battery and consumer electronics testing. He specializes in test design, setup, and failure-mode analysis for a wide range of products. He is proficient in design requirement decomposition and component identification, CNC fabrication and additive manufacturing, multi-stream data acquisition, 3-D scanning, test fixture design, data processing, photo-documentation, and failure analysis.

At Exponent, Mr. Panno has worked on robot-assisted testing of advanced driver assistance systems (ADAS), cell-level battery penetration, consumer electronics accelerated-aging tests, and EV battery full-pack failure-mode tests. His experience in EV battery testing includes thermal runaway propagation, coolant leak investigations, and biaxial pack motion with a coolant ingress condition.

Mr. Panno received his Master of Engineering in Mechanical Engineering from the University of Illinois where he designed, built, and drove a car powered entirely by a handheld drill. He assisted in the research and design of a bipedal robot, using a physics-based model to determine the optimal placement of parts. He also has experience working in ROS, where he programmed a humanoid robot to detect a projectile, determine its trajectory, then move into position to deflect it.

Academic Credentials & Professional Honors

M.S., Mechanical Engineering, University of Illinois at Urbana-Champaign, 2022

B.S., Physics, Eastern Illinois University, 2017

Prior Experience

Associate Audio-Visual Technical Specialist, National Center for Supercomputing Applications (NCSA), 2017 – 2022

Project Experience

Designed and conducted an accelerated-aging test on a consumer electronic device, demonstrating the effects of temperature and humidity on multiple samples. Through data acquisition and photo documentation, elucidated the damaging differences between cycling the device off and on versus leaving it on.