

NASA Academy of Aerospace Quality 2018 Workshop Posters

Friday, September 7, 2018

Ohio Aerospace Institute (OAI), 22800 Cedar Point Road; Brook Park, OH 44142

Rollocopter Development for Titan Exploration	Paul Akangah North Carolina A&T University
Adaptive, Energy Efficient Spatiotemporal Monitoring Using Wireless Sensors	Hadi Alasti Purdue University Fort Wayne
The Design and Fabrication of Portable Electrostatic Detector	Jafar Al-Sharab Northwestern State University
Modular Robotic Systems Toward Space Applications	Jose Baca Texas A&M University
Parker Solar Probe Mission Assurance	Luke Becker Johns Hopkins University Applied Physics Laboratory
Using STK for Engineering Technology Education	Andrew Bell Ivy Tech
Digital and Data-Driven Precision Agricultural Applications Using Unmanned Aircraft Systems (UAS)	Ganesh Bora Mississippi State University
CubedOS: A Verified CubeSat Operating System	Carl Brandon Vermont Technical College
VLC - CubeSat	Rafiya Chowdhury North Carolina A&T University
A Generic Framework for the Miniaturization Of Satellites	Paris Chrysos ISC Paris
The ESG-Grid, A Self-Optimizing Platform in Support of Reliable and Scalable CubeSat Missions	Paul Darby University of Louisiana at Lafayette
Student Cube Sat Payload Projects	Ali Eydgahi Eastern Michigan University
The Business Side of Space	Abraham Falsafi BridgeValley CTC
How To Do Real Physics With a Student Payload	Andy Hollerman University of Louisiana at Lafayette
Using AI to Improve Spacecraft Flight Automation	Mark Horvath Capitol Technology University
Retrodirective Transceiver System for Communication Needs of Formation Flying (Swarm) CubeSats	Giti Javidi University of South Florida
Embedded Reliability in Design Thinking Concept for Aerospace	Kouroush Jenab Morehead State University
Assessment of Autonomic Function of Astronauts Before and After Space Flight Using Power Spectra And Coherence Methods	Ahmed Kamal Tennessee Tech University
Integrating Project Quality Management and Lean Six Sigma Processes to Improve Product Quality	Jamison Kovach University of Houston

Mars Rover Strip (Wheels) Loading Test Applied to Its Regolith Strength Estimation	Jiliang LI Purdue University Northwest
Vehicle Trajectory Planning for Dense 2D Traffic	Yanchao Liu Wayne State University
Project Aether: Small University Mission Quality Assurance	Christopher Murray and Pierce Smith Capitol Technological University
Study of CubeSat Communication and Solar Powered Stirling Engine as a Source of Power	Cyril Okhio, Ted Grosch, Florian Misoc, Matthew Stotter, Cameron McKinney and Justin Keener Kennesaw State University
CubeSat-Inspired Project for First-Year Undergraduate Students: Design and Fabrication of Arduino-Based Prototype with APRS Tracking and High-Altitude Testing via Weather Balloon	Masataka Okutsu Penn State University - Abington
Kalman Filtering in Space Crafts	Snehashis Paul George Mason University
Performance of MoS2 Coated Gears Similar to Those Used in JWST's Dual Wheel Mechanism	Iqbal Shareef Bradley University
Automated Antenna Design for Space Application Using Meta-heuristic Algorithms	Alaa Sheta Texas A&M University
Stabilizing Circadian Rhythm Changes With Low Dose Ketamine For Astronauts In Space	Jithu Sreekumar Tribhuvan University
Closure Fairing Mold Surfaces	James Wronecki East Tennessee State University
Gamma-ray Radiation Detection Coating for Space Shuttles	Zhibin Yu Florida State University
Ultra-high Precision Predictive Assembly of Composite Fuselage Joints via Surrogate Model Based Control	Xiaowei Yue Virginia Tech