

MITTIC Fall 2023 / Spring 2024

Sample NASA Intellectual Property (IP) List



**Important! The 45 selections of NASA Intellectual Property in this document include extra details and webinars that may assist a team with development of their concept. However, a team may use any IP from the NASA patent portfolio as the basis for their business/proposal.

| Aerospace | FACET: Future Air Traffic Management Concepts Evaluation Tool |
|---------------|---|
| | Method and System for Air Traffic Rerouting for Air-space Constraint Resolution - NASCENT |
| | Flight-Path Angles |
| | Flight Awareness Collaboration Tool (FACT) |
| | Unmanned Aerial Systems (UAS) Traffic Management |
| | Artificial Immune System-Based Approach For Airborne Vehicle Maneuvering |
| | Green aviation - improved aerodynamic efficiency and less fuel burn |
| | Multi-Objective Flight Control Optimization Framework |
| | Co-Optimization of Blunt Body Shapes for Moving Vehicles |
| | Aeroelastic Wing Shaping |
| | Multirotor Aircraft Noise Reduction |
| | AirBOS-SR: Visualizing Supersonic Shock Waves with Advanced Imaging Techniques |
| Communication | Soft Decision Analyzer |
| | One Decision 7 maryzer |
| | Microwave Power Combiner |
| Environment | Flame Piloted Vortex (SCWO-FPV) Reactor |
| | |
| | Tool for Rapid Identification of TCE in Plants |
| Health | Methylotrophi Microorganisms Expressing Soluble Methane Convention Monoxygenase Proteins |
| | Rapid Nucleic Acid Isolation Method and Fluid Handling Devices |
| | Microorganism Cultivation Platform for Human Life Support |
| | Nanosensor Array for Medical Diagnoses |
| Information | |
| Tech and | <u>Traffic Aware Planner</u> |
| Software | |
| Manufacturing | Pyramid Image Quality Indicator |
| | Calibration System for Automated Fiber Placement |
| | Internal Friction Reduction (IFR) Tool |
| | Laser Wire Direct Closeout (LWDC) |
| | System for In-situ Defect Detection in Composites During Cure |
| | Durable Redundant Joint (DRJ) |
| | |

| | Silicon Carbide Fiber Tows |
|------------------------------|--|
| Materials and | Carbon Fiber-Carbon Nanotube Yarn Hybrid Reinforcement |
| Coatings | Multilayered Fire Protection System |
| | Method to Reduce Stabilization Time for Shape Memory Alloys |
| Mechanical and Fluid Systems | Compact Active Vibration Control System |
| | Spacecraft Atmosphere Carbon Dioxide (CO2) Capture via Deposition |
| Optics | Active Pointing Monitor for a 2-axis Optical Control System |
| | <u>Li-ion Cell Calorimeter</u> |
| Power | Relaxor Piezoelectric Single Crystal Multilayer Stacks for Energy Harvesting Transducers |
| | Multi-Parameter Aerosol Scattering Sensor |
| Robotics | Robotic Assembly of Photovoltaic Arrays |
| | Autonomous Crash Management System (CMS) |
| Sensors | Multidimensional Damage Detection System |
| | Luminescence-Based Temperature Mapping and Sensing Systems |
| | Multivariate Monitoring for Human Operator and Machine Teaming |
| | <u>Universal Wireless Flight Sensor Systems</u> |
| | Floating Ultrasonic System |
| | Electric Field Imaging System |