

# 2016 CPS V&V Grand Prix

## Carnegie Mellon University

### May 5<sup>th</sup>, 2016





# Judges

**Michael A Kozuch- Intel**

**Aleksey Nogin- HRL Laboratories**

**Jim Kapinski- Toyota**

**Sebastian Scherer- Near Earth  
Autonomy**

**Alwyn Goodloe- NASA**

**Mike Franusich- SprialGen**

**Sarah Loos- Google**

**Badar Khan- Siemens**

**Akshay Rajhans- MathWorks**

**Ron Tozzie- Bosch**

# Students & Projects

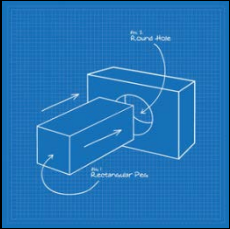
**Connie Wang**

NASCAR Refueling Challenges: The Strategy behind a Pit Stop



**Vincent Huang**

Units of Measure for Hybrid Programs



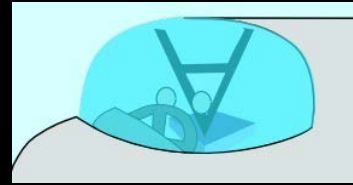
**Zihan Zhou**

Flock on the March



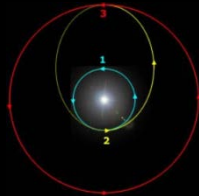
**Brandon Bohrer**

Proofs in the Pilot's Seat: Toward Verified Simultaneous Maneuvers in the Next-Generation Airborne Collision Avoidance System



**Anthony Ko**

Safety of Satellites: Recircularization of Orbits



**Pallavi Santhosh Kumar**

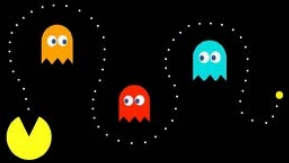
KeYTuner: A Hybrid Guitar Tuning System



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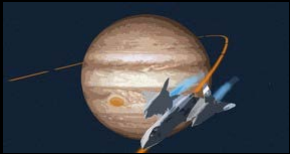
**Jimit Gandhi and Astha Prasad**

Safe Path Planning for an Autonomous Agent in a Hostile Environment



**Adam Moran & John Mann**

Orbital Mechanics of Gravitational Slingshots



**Tianlong Yu**

IoTsafe: A Safe & Verified Security Controller for Internet-of-Things



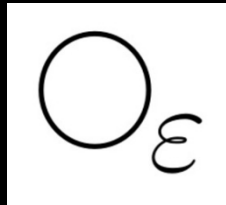
**Rohan Meringenti and Abdel Bourai**

Amazon Fulfillment Centers: Robot Interactions in a Distributed System Paradigm



**Evan Cavallo**

Differential Equations through Temporal Logic and Infinitesimals



**Karim Elmaaroufi and Viren Bajaj**

Safe Diving

