**SSAVES Abstract**

Globally, each year, sinking car crashes claim the lives of 5,000 people. In Florida alone a death from a sinking car occur nearly every week.  Sinking vehicle deaths are preventable as they are a result of drowning rather than as a result of trauma sustained during the crash.  Current products are available to help people escape sinking cars. But do not address crash safety effectively.  The Sinking Safety Autonomous Vehicle Egress System (SSAVES) introduces a system designed specifically to increase survivability in sinking car crashes. This technology does not add any potential hazards to the escaping passengers unlike others on the market.  SSAVES integrates a series of systems that work together to: (1) determine the sinking emergency, (2) increase the flotation of the car, and (3) help passengers escape. The sensing module includes a pressure and water detection sensors to detect a sinking situation.  By integrating these two sensors into one module, any false positives that occur because of every day driving do not alert the system.  The sensing module also finds the car in real-time and shares this information with first responders.  Once this module determines a sinking situation, it sends a signal to the egress module. This module activates a solenoid pin to safely and swiftly allow the driver side window to drop into the open position. This open window provides a safe means of egress for the passengers.  The third and final module uses a low-density foam to increase the buoyancy of the car. Increasing the buoyancy gives the passengers more time to escape through the open window. SSAVES enables the passengers to escape their sinking car within 90 seconds.