



Camilo Gaitan
EE'18

Thomas Koch
EE'18

John Gambale
EE'18

Andy Tong
ME'18

Giovanni Sanchez
ME'18

**Professor
Toby Cumberbatch
Professor Robert Dell**

FACULTY ADVISORS

SPLAT: SUPERIOR PRECISION LANDING FOR AUTONOMOUS TOUCHDOWNS

Drones are becoming increasingly useful in industry, but are limited in application due to their short flight times. In an effort to increase flight time, we present a system capable of precision landing drones to enable automated battery switching. We use image processing methods to perform state estimation of the drone, so that we may guide the drone to a landing platform. At the landing platform, the drone's batteries are automatically switched using a robotic switching mechanism and custom battery case.

