

Team 8 - Maximum Power Point Tracker

MSU Solar Car

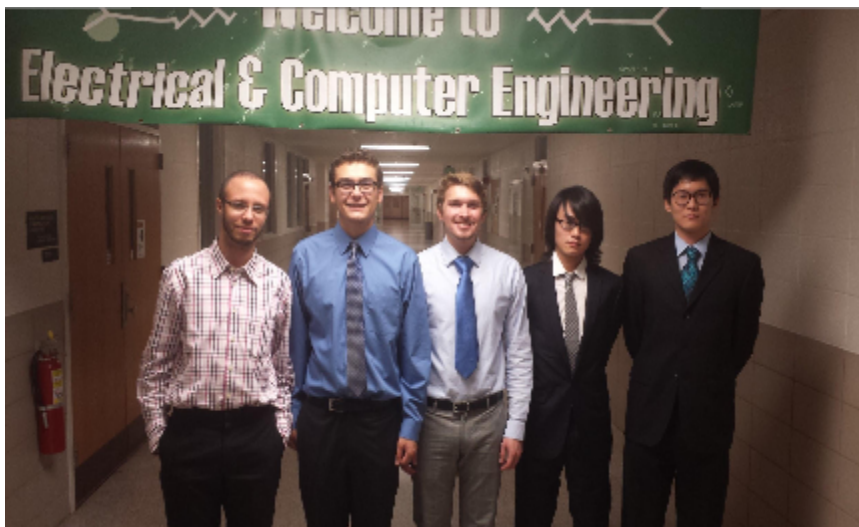
The Michigan State Solar Car Racing Team tasked us with creating a new Maximum Power Point Solar tracker for their new solar car.

A maximum power point tracker is the device that connects the solar array of the solar car to the battery. This device is necessary because the solar array has a relatively low voltage. The MPPT device is used to match this low voltage to the high voltage of the battery.

The MMPT device maximizes the power of the solar array by finding the point at which the voltage is highest without the current dropping.

Maximum Power Point Tracking is used in any device that contains a solar array. They are used in cars, buses, landscaping, chargers, pools, boats, etc.

Our team has one main requirement while creating the MPPT and that is to achieve 95% efficiency for our device. Once that goal is achieved we will focus on making our design as small, light, and cost effective as possible.



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