



## **Senior Design Project Summary for Website Project List**

### **Summer Term**

**PROJECT NAME** (Spell out acronyms or define them in the summary below): iPV++

**SUMMARY:** In simple, non-scientific terms, describe the problem that your project aims to solve, and then describe your project, answering all that apply: What does the project do? Who needs it/who would use it? How does it work? Why is it different/ better than what's available or has been done before? What are possible applications? Other selling points? (Ex: provides a low-cost way to do something; it makes something easier to do or last longer; it's never been done before, it conserves energy/ water/reduces pollution, etc.)

iPV++ stands for integrated Photovoltaic power module. The purpose of our project is to create a unique architecture that integrates smart power electronics with local storage and battery management to harvest solar power. Due to the current poor design of PV and battery systems, our purpose is to reimagine PV systems that are easy and cost-effective to install, configure, and operate. This will allow valuable reliability and economic assets that can eventually be tied into the power grid. This multidisciplinary project includes both electrical and mechanical engineering students.

**LIST ALL TEAM MEMBERS, MAJOR & CONTACT INFO (indicate team leader or primary contact)**

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**Interdisciplinary: (Yes), if yes, with which department: Mechanical Engineering**

**SPONSORS (if any):**