

UCI SMART IAC



Who we are

We are the University of California, Irvine Sustainable Manufacturing Alliance for Research and Training Industrial Assessment Center (UCI SMART IAC)

Student Team Members (featured below):

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Faculty and Staff Support: Dr. G.P. Li (Calit2), Dr. Yutian Ren (Data Engineering ThinkTank), Chelsea Choudhary (SMART IAC)

Our Mission

To promote energy efficiency, waste reduction, and sustainability in the industrial and commercial building sectors.

Cultivating Awareness in Green Computing: A Leap Towards Sustainable AI

We would like to further support our mission by increasing awareness and transparency of energy consumption and emission production by Artificial Intelligence (AI) computing.

The era of AI is poised to radically transform a multitude of sectors. With the rapid innovation in AI technologies comes a substantial electricity demand. Predictions show that data centers could consume up to 21% of the global electricity supply by 2030.

We propose to expand on current models of carbon emissions from data centers and create a robust Carbon Efficiency Measurement System to monitor and analyze emissions associated with AI operations. The system aims to not only quantify emissions, but also serve as a catalyst for developing carbon mitigation strategies.

Together we can work towards a cleaner energy future, fewer carbon emissions, and clean air quality for all!