AI & Machine Learning for
Solar Panel Manufacturing EL Inspection

- **Problem**
  - Solar panel EL inspection is visual and rely on human inspectors. They visually inspect thousands of image per day. Inconsistent, accuracy 92-97%, causing inspector's eye stain.

- **Solution**
  - Use Machine Learning (ML) computer vision for EL image inspection
    - ➢ Can reach 99% accuracy, faster and cost less. Potential saving $100 millions.

- **Team**

  Kevin Gao – Entrepreneur in solar and IoT smart tech startup, inventor of multiple US patents.

  Saad Youssefi – Director of a online software platform for solar project developers to do solar PV site sizing analysis and design layout.

- **Plan**
  - Obtain more datasets of EL images, and run more model training iterations in AI cloud.
  - Working with EL testing equipment manufacturers to deploy the model into their equipment.
  - Release URL and allow solar farm operators to use the model to do training, quality inspection, allow operators to have valuable data of existing solar assets in operation.