

Previous Work

Giovanni Bianchi: Single Evaluation of Building Energy Demand

Johannes Hofer: Detailed Model and Evaluation of PV Electricity Production

Prageeth Jayathissa: Parametric Thermal Model with Estimated PV

Master Thesis Goals

- Combine to Create Single Model
- Design Parametric Simulation Tool
- Evaluate Multiple Scenarios

Long Term Goals

Implementation of
ASF Control Strategies

Detailed Parametric Model
for ASF Design Considerations

In Depth Analysis of
ASF Performance

- Add Bypass Diodes and String Connection to PV Model
- Implement RC Model
- Include Energy for Actuation

- Extended Evaluation of Individual Actuation
- Iterative Algorithm to Increase Accuracy
- Life Cycle Analysis