

# Ted Dersch



# Problem Presented

- Cactus is used to
  - Database used to store information for each phase of experiment.
  - Transitioning away from Kyoto Tycoon, due to lack of maintenance and near impossible to compile with modern technology.

# Issues

Lack of comments

Lack of Debugger support

Working through large codebase to better understand the overall dependencies.

- I have been working on integrating Redis as an optional database to use for each phase of the cactus experiment.
  - Refactor existing codebase to switch between Kyoto Tycoon and Redis seamlessly.
  - Gain an understanding of the legacy XML files used to configure each stage of the experiment.
    - This was a struggle
  - Learned Toil and attempted to decipher code dependencies to implement Redis as a possible database without breaking anything.
    - Even bigger struggle
  - Learn existing tools to implement my code changes into existing codebase (pip install --upgrade .)
  - Create alias' to help newcomers implement changes quicker.
  - Apply software engineering principles to existing code for future maintenance and changes.

- Currently, I have added functionality to accept the command line argument `--Database Redis`
  - Upon command line argument Redis
    - configure necessary dependencies needed for each step of the cactus experiment.
  - Refactored code to get and set which database is used.
    - Default Kyoto Tycoon
  - Created dictionary of cactus call parameters
    - Easier to read and maintain down the line
  - Merged Redis code into master code

Questions?