## Research Report

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## Review of the issues

- New: Reconstruct from new code (John2)
- New: Cardiac Journal Final Format Due 12/23 midnight
- New: look at financial code NLR reconstruction
- Reconstruct triangle loop bounds
  - make NLR more smart by ensuring line information is read and used
- Energy Tuning Project
  - Lulesh benchmark using PPCG
  - PNNL benchmark

## **Progress**

- NLR Output + Manual non-significant change generated a valid scop
  - Need to distinguish Read(i) from Read(value)
    E.g. A[i] = value, how to tell i from value? Current solution: manual intervention
  - Need to output a statement, not just an access (current solution: manual intervention)
    - E.g. A[i] = 0, should not just dump write A[i] (either the trace, or the post processor must handle this)
  - --Need to assess the quality (usefulness) of this techinque (current research stopped at the dependency analysis phase of PoCC)

## The Plan

- Finish Cardiac Journal Last Version Edits (format according to guidelines)
- Develop Automatic Way to handle newer memory trace format
- Look at Financial code and try to instrumente and run them