

Status report: Shonan Challenge for Staged HPC

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Submitted challenges

- ▶ Overlap tiling
- ▶ FFTN
- ▶ Sparse matrix format
- ▶ Complex number representation
- ▶ A staged matrix algebra library
- ▶ A dynamic programming library
- ▶ Integer intervals query
- ▶ Image processing pipeline
- ▶ A staged Hidden Markov Model library
- ▶ OpenCV computer vision library

Also a list of notable HPC test code suites.

What to do with these challenges?

- ▶ Launch a web page, listing all the challenges.
- ▶ Classify and specify them:
 - ▶ code fragment (Can we transform like this?)
 - ▶ library (Can we write such a library?)
 - ▶ project (???)
- ▶ Go for them!
- ▶ List new challenges.

What else?