OOKAMI PROJECT APPLICATION

Date:

October 7, 2021

Project Title:

Optimizing Sparse Tensor Methods for ARM systems

Usage:

- Testbed

Principal Investigator:

- University/Company/Institute: College of William & Mary

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Names & Email of initial project users:

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Usage Description:

We intend to explore ARM architecture for sparse tensor methods and operations by using Scalable Vector Extension (SVE), Scalable Matrix Extension (SME), and NUMA features. This project is collaborating with the research of ARM company and Google research as well.

Computational Resources:

- Total node hours per year: 8,000

- Size (nodes) and duration (hours) for a typical batch job: 1 node-0.5hr for the first year; more nodes might needed in the future

- Disk space (home, project, scratch): home: 30GB; scratch: 1TB; project: 3TB

Personnel Resources (assistance in porting/tuning, or training for your users):

Brief training or tutorial would be great. Giving guidance materials for us to read is also good enough.

Required software:

Compiler, BLAS libraries

If your research is supported by US federal agencies:

- Agency: Department of Energy

- Grant number(s): TBD (a newly approved project)