HPC Projects include, but are not limited to:

(Computer Science, Math)
Implementing proven methods for doing secure distributed matrix multiplication (SDMM) and researching new methods for doing SDMM.
*Skills:* C programming or similar, linear algebra would be helpful

(Computer Science, Computer Engineering)
Analyzing the performance of graph analytic frameworks (GAFs) for use in HPC environments
*Skills:* programming in Matlab, C/C++, ability and patience to troubleshoot computer software issues

(Math, Computer Science)
Implementing machine learning (ML) algorithms (more specifically, tensor decomposition algorithms) in Spark for use on HPC systems
*Skills:* linear algebra, programming in C/C++ or similar, MatLab

(Math, Computer Science)
Applying novel optimization techniques to a non-linear programming problem with no known polynomial-time solution techniques.
*Skills:* programming in Python, experience applying ML algorithms is useful, linear algebra is useful

(Computer Science, Computer Engineering)
Creating tools and benchmarks for Structural Simulation Toolkit (SST), a simulation framework used to simulate diverse aspects of hardware and software.
*Skills:* programming Python or C++, experience with discrete event simulation