Design of Parallel and High Performance Computing

HS 2018 Torsten Hoefler, Markus Püschel Department of Computer Science ETH Zurich

Homework 6

Vectorizing the Floyd-Warshall Algorithm

The Floyd Warshall Algorithm is for solving the All Pairs Shortest Path problem. The problem is to find shortest distances between every pair of vertices in a given edge weighted directed graph. Starting from the code provided in floyd_warshall.tar.gz, use SSE4 or AVX intrinsics to vectorize it and analyze the obtained speed up.