

CS 5220  
Project 3 - Floyd-Warshall Algorithm

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# 1 Introduction

## 2 Design Decisions

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## 3 Analysis

### 3.1 Original Implementation

#### 3.1.1 Profiling

#### 3.1.2 Scaling Study

#### 3.1.3 Strong Scaling Study

#### 3.1.4 Weak Scaling Study

### 3.2 Tuned Parallel Implementation

#### 3.2.1 Profiling

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#### 3.2.3 Strong Scaling Study

#### 3.2.4 Weak Scaling Study

### 3.3 MPI Implementation

#### 3.3.1 Profiling

#### 3.3.2 Scaling Study

#### 3.3.3 Strong Scaling Study

#### 3.3.4 Weak Scaling Study

## References

- [1] Data Alignment to Assist Vectorization. (n.d.). Retrieved September 30, 2015, from <https://software.intel.com/en-us/articles/data-alignment-to-assist-vectorization>
- [2] Yliluoma, J. (n.d.). Guide into OpenMP: Easy multithreading programming for C. Retrieved October 19, 2015, from <http://bisqwit.iki.fi/story/howto/openmp/>