Laboratory Report

Interpolating the elevations into a higher resolution digital elevation matrix M given a lower resolution digital elevation matrix N

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1 Introduction

2 Objectives

The goal for this exercise is the following:

- to determine the average running time and time complexity of the computer program for interpolating the elevation of an $n \times n$ square matrix.
- to figure out ways to further improve the average running time of the computer program.

3 Methodology

The computer used for this activity is running on Ubuntu 22.04.2 LTS $x86_64$, Intel i-7 8700 (12 cores) @ 4.6GHz, AMD ATI Radeon HD 8570 / RS 430, with 16GB memory.

- 4 Results and Discussion
- 5 Conclusion
- 6 References
- 7 Appendices