

# ELEN4020: DATA AND INTENSIVE COMPUTING LABORATORY EXERCISE 1

**Timothy McBride (732037)    Nabeel Vandayar (704528)    Dane Slattery 789132**

*University of the Witwatersrand, School of Electrical and Information Engineering,  
Private Bag 3, 2050, Johannesburg, South Africa*

**Abstract:** The abstract

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## 1 INTRODUCTION

This main focus for this laboratory was to create a methodology to perform operations on multidimensional arrays of varying size. The exercise makes use of C to create three procedures that operate on K dimensional arrays. These three procedures take a K dimensional integral array, the dimensional bounds of that array and an integer for the total number of dimensions within the array. The purpose for the three procedures are:

1. Set all elements in the array to zero.
2. Set ten percent of the elements in the array uniformly to one.
3. Select five percent of the elements in the array and then display their coordinates and value.

Additionally a main program is written to create four arrays, the procedures that are developed are run on each of the arrays generated.

## 2 PROBLEM SOLUTION

## 3 INSTRUCTIONS TO ACCESS THE REPOSITORY

## 4 CONCLUSION

## REFERENCES

[1]