

Mathematical Techniques for Computer Science

Revision Notes

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1 Introduction

These are notes I have written in preparation of the 2017 Mathematical Techniques for Computer Science exam. This year the module was run by Achim Jung (A.Jung@cs.bham.ac.uk).

2 Systems of Linear Equations

2.1 Gaussian Elimination

3 Analytic Geometry

3.1 In the Plane

3.2 In Three Dimensions

4 Matrices

5 Sets

5.1 Cardinality

6 Functions and Relations

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6.2 Functions

7 Inductive Definitions

8 Probability

8.1 Discrete Random Variables

8.2 Continuous Random Variables