

# Some Title

Some subtitle

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Computer Science, xXx

Semester Project



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## **AALBORG UNIVERSITY**

### STUDENT REPORT

**Title:**

Project Title

**Abstract:**

This is the abstract.
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**Theme:**

Scientific Theme

**Project Period:**

Fall Semester 2022

**Project Group:**

xXx

**Participant(s):**

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# **AALBORG UNIVERSITET**

## STUDENTERRAPPORT

**Titel:**

Rapportens titel

**Abstract:**

Her er resuméet
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**Tema:**

Semestertema

**Projektperiode:**

Efterårssemestret 2010

**Projektgruppe:**

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**Deltager(e):**

Forfatter 1

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# Preface

This is the preface. You should put your signatures at the end of the preface.

Aalborg University, August 17, 2022

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# Chapter 1

## Introduction

Welcome to Aalborg University (AAU). Here we use  $\text{\LaTeX}$  to typeset our high quality reports. Checkout the Appendix A for examples.



# Acronyms

**AAU** Aalborg University. 1



# Bibliography

- [1] Daniel Runge Petersen. *AAU-Dat templates*. URL: <https://github.com/AAU-Dat/templates> (visited on 08/17/2022).





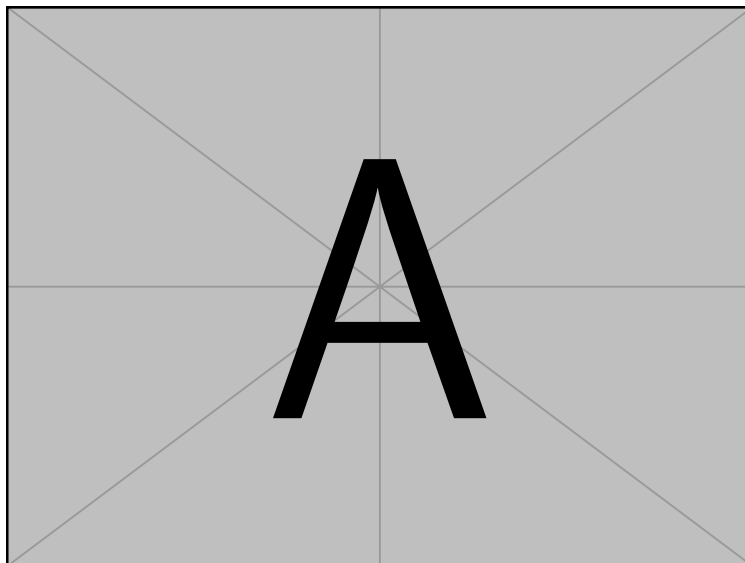
# Appendix A

## Examples

When working in  $\text{\LaTeX}$  we have basic text, such as this, and non-basic elements called 'floats'. They are called floats because they float about the page, trying to be as unobtrusive as possible. The common floats used by us Computer Science students are: Figures, Tables, Listings, and potentially Algorithms.

### A.1 Figures

Figures include an image or a graphical frame of some sort.



**Figure A.1:** An example of a figure float with width at 70% text width - **do not** use scale.

## A.2 Tables

Tables are often more difficult than figures, but they can look gorgeous.

Features	Events	Threads	Protothreads
Control structures	no	yes	<b>yes</b>
Debug stack retained	no	yes	<b>yes</b>
Implicit locking	yes	no	<b>yes</b>
Preemption	no	yes	<b>no</b>
Automatic variables	no	yes	<b>no</b>

**Table A.1:** An example table. Do not use *vertical* (|) lines if you can avoid it.

## A.3 Listings/Algorithms

We can use the listing float for both code and pseudocode, but in case you want to distinguish between them, the Algorithm environment is a good substitute for pseudocode.

```
#include <stdio.h>

int main() {
    printf("Hello World!");
    return 0;
}
```

**Listing A.1:** Example of C code with standard styling.

```
1 import numpy as np
2
3 def incmatrix(genl1,genl2):
4     m = len(genl1)
5     n = len(genl2)
6     M = None #to become the incidence matrix
7     VT = np.zeros((n*m,1), int) #dummy variable
```

**Listing A.2:** Example of python code with custom styling from preamble and lines highlight.

For pseudocode, if you don't want to use the listing float, you can use the algorithm float instead.

```
INSERTION-SORT( $A$ )
1  for  $j = 2$  to  $A.length$ 
2       $key = A[j]$ 
3      // Insert  $A[j]$  into the sorted sequence  $A[1..j-1]$ .
4       $i = j - 1$ 
5      while  $i > 0$  and  $A[i] > key$ 
6           $A[i+1] = A[i]$ 
7           $i = i - 1$ 
8       $A[i+1] = key$ 
```

**Algorithm A.1:** Example of pseudocode (codebox) in an algorithm float.

## A.4 Floats and content

Note that Figures use `includegraphics`, Tables use `tabular`, Listings use `minted` and Algorithms use `codebox` in the above example. This is NOT a hard and fast rule. You could have an Algorithm with an `includegraphics` screengrab, or a Listing with a `tabular` to create columns for code side by side comparisons.