IT UNIVERSITY OF COPENHAGEN

Department of Computer Science
KISPECIxxx - Master Thesis

Thesis Title

Prepared by: Your name (xxxx@itu.dk)
Supervised by: Supervisor's name
Date: May 23, 2024

Abstract

This is a placeholder for an abstract. Before continuing, please, update your name, your supervisor's name, class code and the thesis title.

Then follow the rest of the instructions and create and include custom sections.

Contents

1 Figures

The "`figure`" environment should be used for figures. One or more images can be placed within a figure. If your figure contains third-party material, you must clearly identify it as such, as shown in the example below.

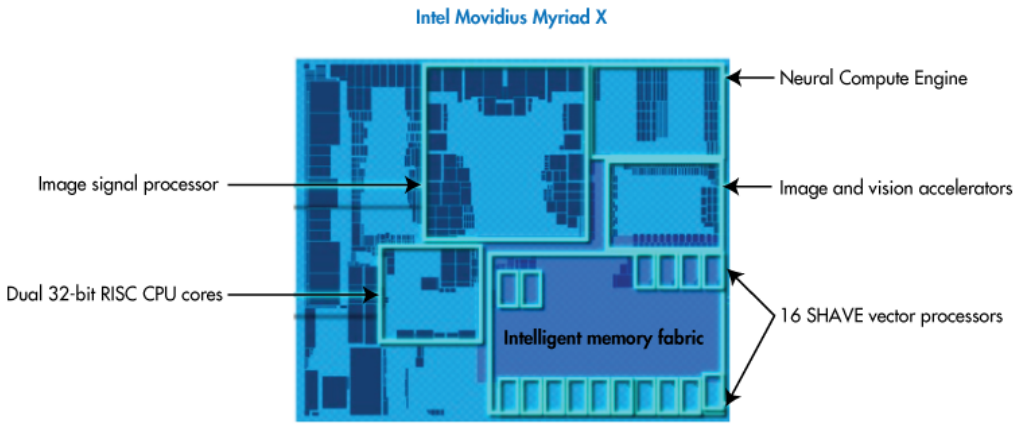

Figure 1: Diagram of the Intel Movidius Myriad X architecture. [**?**]

Your figures should contain a caption which describes the figure to the reader.

Figure captions are placed *below* the figure.

2 Tables

This template includes the "`booktabs`" package — `https://ctan.org/pkg/booktabs` — for preparing high-quality tables.

Table captions are placed *below* the table.

Because tables cannot be split across pages, the best placement for them is typically the top of the page nearest their initial cite. To ensure this proper "floating" placement of tables, use the environment **table** to enclose the table's contents and the table caption. The contents of the table itself must go in the **tabular** environment, to be aligned properly in rows and columns, with the desired horizontal and vertical rules. Again, detailed instructions on **tabular** material are found in the *LaTeX User's Guide*.

Non-English or Math	Frequency	Comments
Ø	1 in 1,000	For Swedish names
π	1 in 5	Common in math
\$	4 in 5	Used in business
Ψ_1^2	1 in 40,000	Unexplained usage

Table 1: Frequency of Special Characters

Immediately following this sentence is the point at which Table 1 is included in the input file; compare the placement of the table here with the table in the printed output of this document.

3 Math Equations

You may want to display math equations in three distinct styles: inline, numbered or non-numbered display. Each of the three are discussed in the next sections.

3.1 Inline (In-text) Equations

A formula that appears in the running text is called an inline or in-text formula. It is produced by the **math** environment, which can be invoked with the usual `\begin ...\end` construction or with the short form `$ ...$`. You can use any of the symbols and structures, from α to ω, available in LaTeX [1]; this section will simply show a few examples of in-text equations in context. Notice how this equation: $\lim_{n\to\infty} x = 0$, set here in in-line math style, looks slightly different when set in display style. (See next section).

3.2 Display Equations

A numbered display equation—one set off by vertical space from the text and centered horizontally—is produced by the **equation** environment. An unnumbered display equation is produced by the **displaymath** environment.

Again, in either environment, you can use any of the symbols and structures available in LaTeX; this section will just give a couple of examples of display equations in context. First, consider the equation, shown as an inline

equation above:

$$\lim_{n \to \infty} x = 0 \tag{1}$$

Notice how it is formatted somewhat differently in the **displaymath** environment. Now, we'll enter an unnumbered equation:

$$\sum_{i=0}^{\infty} x + 1$$

and follow it with another numbered equation:

$$\sum_{i=0}^{\infty} x_i = \int_{0}^{\pi+2} f \tag{2}$$

just to demonstrate LaTeX's able handling of numbering.

4 Code Listings

You may want to highlight a piece of code. For this you can use the `lstlisting` environment.

Example of this can be found in Listing 1. In the case of languages other than Python you can use the `language` directive of the `lstlisting` environment, which will fix the formatting and code highlighting accordingly.

```
for num in range(1, 101):
    if num % 15 == 0:
        print("FizzBuzz")
    elif num % 3 == 0:
        print("Fizz")
    elif num % 5 == 0:
        print("Buzz")
    else:
        print(num)
```

Listing 1: Example Python listing (FizzBuzz)

5 Citations and Bibliographies

Authors' names should be complete — use full first names ("Donald E. Knuth") not initials ("D. E. Knuth") — and the salient identifying features

of a reference should be included: title, year, volume, number, pages, article DOI, etc.

The bibliography is included in your source document with these two commands, placed just before the `\end{document}` command:

```
  \bibliographystyle{IEEEtran}
\bibliography{IEEEabrv,cites}
```

where "`cites`" is the name of the bibliography file without the suffix.

Some examples. A paginated journal article [2], an enumerated journal article [3], a reference to an entire issue [4], a monograph (whole book) [5], a monograph/whole book in a series (see 2a in spec. document) [6], a divisible-book such as an anthology or compilation [7] followed by the same example, however we only output the series if the volume number is given [8] (so Editor00a's series should NOT be present since it has no vol. no.), a chapter in a divisible book [9], a chapter in a divisible book in a series [10], a multi-volume work as book [11], a couple of articles in a proceedings (of a conference, symposium, workshop for example) (paginated proceedings article) [12, 13], a proceedings article with all possible elements [14], an example of an enumerated proceedings article [15], an informally published work [16], a couple of preprints [17, 18], a doctoral dissertation [19], a master's thesis: [20], an online document / world wide web resource [21, 22, 23], a video game (Case 1) [24] and (Case 2) [25] and [26] and (Case 3) a patent [27], work accepted for publication [28], 'YYYYb'-test for prolific author [29] and [30]. Other cites might contain 'duplicate' DOI and URLs (some SIAM articles) [31]. Boris / Barbara Beeton: multi-volume works as books [32] and [33]. A couple of citations with DOIs: [34, 31]. Online citations: [35, 21, 36]. Artifacts: [37] and [38].

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