

My Beamer L^AT_EX Template

A Demo for the theme

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Outline

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2. Background
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Introduction

- This is just a short example



Introduction

- This is just a short example
- It works with xeLaTeX



Background

Slides with \LaTeX

Beamer offers a lot of functions to create nice slides using \LaTeX .



中文

- 本模板支持中文。

静夜思

床前明月光，疑是地上霜。
举头望明月，低头思故乡。



Python

```
# -*- coding: utf-8 -*-

import torch # root package
import torch.autograd as autograd # computation graph
import torch.nn as nn # neural networks
import torch.nn.functional as F # layers, activations and more
import torch.optim as optim # optimizers e.g. gradient descent,
    ADAM, etc.
from torch import Tensor # tensor node in the computation graph
from torch.jit import script # hybrid frontend decorator and
    tracing jit
from torch.jit import trace
```



C++

C++

```
void DifferentThing(const std::string &s) {
    std::cout << "DifferentThing " << s << std::endl;
}

int main (int argc, char *argv[]){
    if (argc > 2) {
        std::string param1(argv[1]);
        std::string param2(argv[2]);

        if (param1 == "function1")
            std::cout << param2 << std::endl;
        else if (param1 == "function2")
            DifferentThing(param2);
    }
    return 0;
}
```



Input: HOSVD($\mathcal{X}, R_1, R_2, \dots, R_N$)

Output: $\mathcal{G}, A_{(1)}, A_{(2)}, \dots, A_{(N)}$

```
1 for  $k = 1$  to  $N$  do  
2   |  $A_{(n)} \leftarrow R_n$  left singular matrix of  $X_{(n)}$   
3 end  
4  $\mathcal{G} \leftarrow \mathcal{X} \times A_{(1)}^T \times A_{(2)}^T \dots \times A_{(N)}^T$   
5 return  $\mathcal{G}, A_{(1)}, A_{(2)}, \dots, A_{(N)}$ 
```

Algorithm 1: HOSVD

