

( 运行环境 : Ubuntu 14.04 )

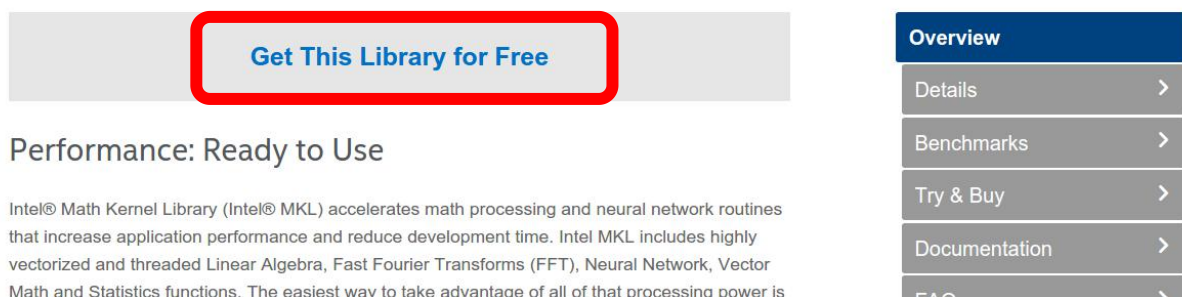
## 一、安装前的准备

① boost 库 : `sudo aptitude install libboost-dev libboost-iostreams-dev libboost-system-dev libboost-filesystem-dev`

② Eigen 库 : 解压 EUREKA-MangoNMT/3rdparty 文件下的 Eigen.tgz 压缩包到当前目录

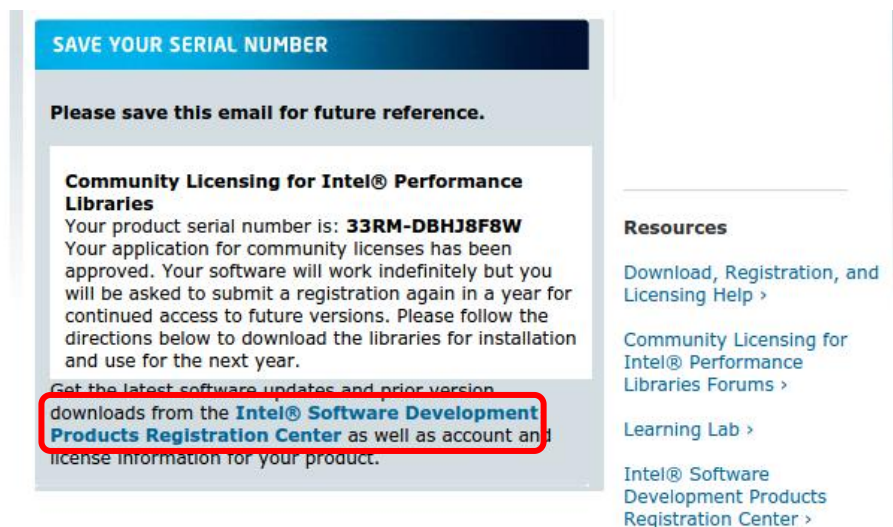
③mkl 库 : 打开网址 <https://software.intel.com/en-us/intel-mkl>

点击免费下载 :



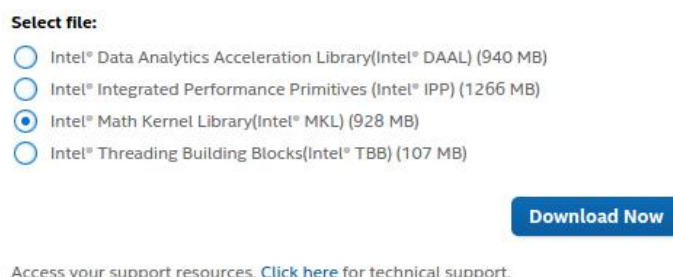
The image shows the Intel MKL download page. A red rectangle highlights the button "Get This Library for Free". To the right is a sidebar with links: Overview, Details, Benchmarks, Try & Buy, Documentation, and FAQ. The main content area has the heading "Performance: Ready to Use" and a paragraph about Intel MKL's capabilities.

填好邮箱和地区以后提交 , 随后邮箱里将会收到激活序列号 , 打开邮件中的网址 :



The image shows an email template for Intel MKL. A red rectangle highlights the text: "Get the latest software updates and prior version downloads from the Intel® Software Development Products Registration Center as well as account and license information for your product." The email also includes a header "SAVE YOUR SERIAL NUMBER", a subject line "Community Licensing for Intel® Performance Libraries", and a product serial number "33RM-DBHJ8F8W".

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The image shows the Intel MKL download selection page. It lists four files: Intel® Data Analytics Acceleration Library (Intel® DAAL) (940 MB), Intel® Integrated Performance Primitives (Intel® IPP) (1266 MB), Intel® Math Kernel Library (Intel® MKL) (928 MB), and Intel® Threading Building Blocks (Intel® TBB) (107 MB). The Intel® MKL file is selected. A "Download Now" button is at the bottom right. Below the button is a link to "Access your support resources. Click here for technical support."

在解压目录中输入 : `sudo ./install.sh`

一路选择 accept 或 enter，当安装到出现下图这一步时，输入激活序列：

```
mayu@bellwind: ~/l_mkl_2017.0.098
Step 3 of 7 | License activation
-----
If you have purchased this product and have the serial number and a connection
to the internet you can choose to activate the product at this time.
Alternatively, you can choose to evaluate the product or defer activation by
choosing the evaluate option. Evaluation software will time out in about one
month. You can also use license file or Intel(R) Software License Manager.
-----
1. I want to activate my product using a serial number [default]
2. I want to evaluate this product or activate later
3. I want to activate by using a license file, or by using Intel(R) Software
   License Manager
-----
h. Help
b. Back to the previous menu
q. Quit
-----
Please type a selection or press "Enter" to accept default choice [1]:
Please type your serial number (the format is XXXX-XXXXXXX):
```

回车继续安装，所有选项选择 1。

进行到此画面时安装完毕：

```
mayu@bellwind: ~/l_mkl_2017.0.098
Step 7 of 7 | Complete
-----
Thank you for installing and for using Intel(R) Math Kernel Library 2017
for Linux*.

Support services start from the time you install or activate your product. If
you have not already done so, please create your support account now to take
full advantage of your product purchase.

Your support account gives you access to free product updates and upgrades as
well as interactive technical support at Intel(R) Premier Support.

Click here https://software.intel.com/en-us/python-distribution
to download Intel(R) Distribution for Python*
This download will initiate separately. You can proceed with the installation
screen instructions.
-----
Press "Enter" key to quit:
mayu@bellwind:~/l_mkl_2017.0.098$
```

## 二、编译

① 从 github 上下载：git clone <https://github.com/jiajunzhangnlp/EUREKA-MangoNMT.git>

② 进入文件夹编译，安装：

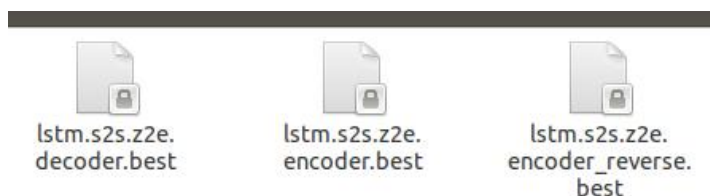
```
cd /EUREKA-MangoNMT/src
make
```

## 三、测试样例

① 进入 EUREKA-MangoNMT/tutorial 文件夹，测试该项目自带数据：

```
cd /EUREKA-MangoNMT/tutorial
chmod 777 *.sh
./train_ch2en.sh
```

这一步会运行较长时间。完成后在此文件夹下生成 3 个新的文件：



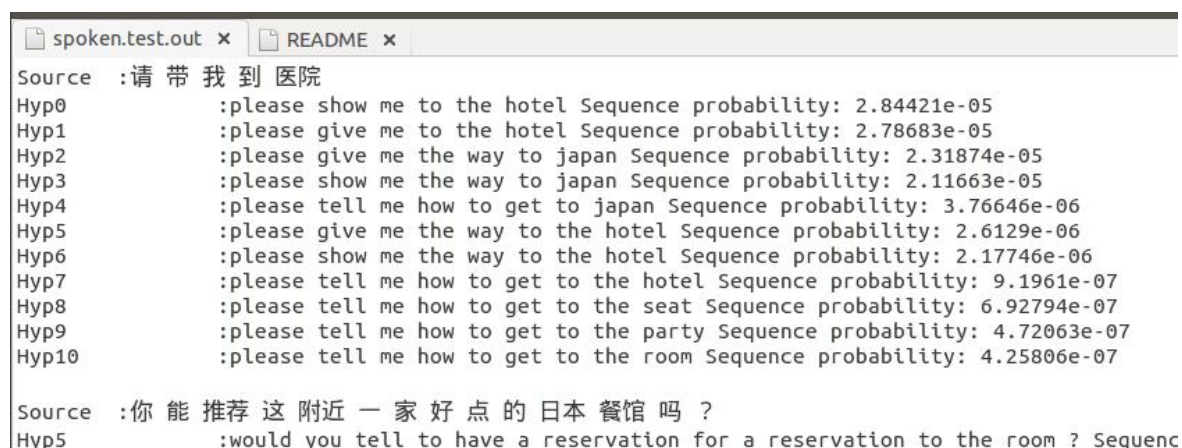
② 之后运行：

```
./generate_ch2en.sh lstm.s2s.z2e.decoder.best lstm.s2s.z2e.encoder.best  
lstm.s2s.z2e.encoder_reverse.best
```

将生成 spoken.test.out 文件：



里面是对 spoken.test 文件中的中文数据的翻译：



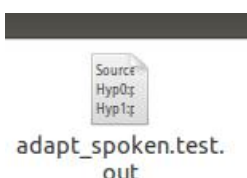
③ 用修正后的算法翻译：

修改 adapt\_generate\_ch2en.sh 文件，将/src-full-open 改为/src，spoken.test.out 改为

adapt\_spoken.test.out 后，运行：

```
./adapt_generate_ch2en.sh lstm.s2s.z2e.decoder.best lstm.s2s.z2e.encoder.best  
lstm.s2s.z2e.encoder_reverse.best
```

将多出一个 adapt\_spoken.test.out 文件：



文件内容同 spoken.test.out 类似，不同之处为：

```
diff.txt x
2,12c2,12
< Hyp0      :please give me to the hotel Sequence probability: 3.91736e-05
< Hyp1      :please show me to the hotel Sequence probability: 3.65116e-05
< Hyp2      :please bring me to the hotel Sequence probability: 3.36601e-05
< Hyp3      :please give me to the seat Sequence probability: 3.11587e-05
< Hyp4      :please give me the way to japan Sequence probability: 2.72478e-05
< Hyp5      :please show me the way to japan Sequence probability: 2.34583e-05
< Hyp6      :please give me the next time Sequence probability: 2.10953e-05
< Hyp7      :please show me to the room Sequence probability: 1.13477e-05
< Hyp8      :please show me the way to me Sequence probability: 9.08897e-06
< Hyp9      :please give me to the room Sequence probability: 9.05559e-06
< Hyp10     :please give me the way to me Sequence probability: 7.36878e-06
---
> Hyp0      :please show me to the hotel Sequence probability: 2.84421e-05
> Hyp1      :please give me to the hotel Sequence probability: 2.78683e-05
> Hyp2      :please give me the way to japan Sequence probability: 2.31874e-05
> Hyp3      :please show me the way to japan Sequence probability: 2.11663e-05
> Hyp4      :please tell me how to get to japan Sequence probability: 3.76646e-06
> Hyp5      :please give me the way to the hotel Sequence probability: 2.6129e-06
> Hyp6      :please show me the way to the hotel Sequence probability: 2.17746e-06
> Hyp7      :please tell me how to get to the hotel Sequence probability: 9.1961e-07
> Hyp8      :please tell me how to get to the seat Sequence probability: 6.92794e-07
> Hyp9      :please tell me how to get to the party Sequence probability: 4.72063e-07
> Hyp10     :please tell me how to get to the room Sequence probability: 4.25806e-07
```

发现计算出来的概率不同了。