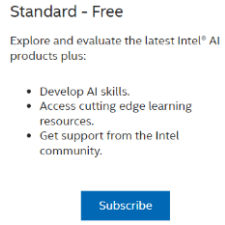
Guide for intel® Developer Cloud

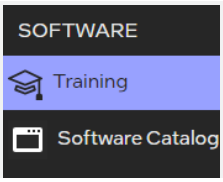
Product Brief

How to Sign Up

1. Go to Intel Developer Cloud: https://cloud.intel.com/



2. Click Get Started
3. Subscribe to "Standard" service tier and complete cloud registration.



4. Select "Training"
5. Launch a Jupyter Notebook
6. Or access Prediction Guard LLM APIs

Intel experts are available on Discord to help you build a winning application!

Hugging Face Challenge
Push your customized models to Hugging Face and gain 20 points towards the Intel prize.

See scoring rubric for more details.

Compute Access

Choose Your Accelerator:

- **Jupyter Hub Interface**: A shared service environment backed by Intel Max series GPUs and 4th Generation Intel® Xeon® Scalable Processors.

Project Ideas

- **Music Generator:** Create an AI-based tool that generates new music compositions based on a given genre or prompt.
- **AI-Powered Story Writer:** Build a tool that auto-generates short stories or scripts based on a theme or set of characters.
- **Stable Diffusion Comic Book Creator:** Utilize generative AI to create dynamic comic book layouts and stories.
- **PDF Chat:** Develop an interactive PDF where users can chat with an AI to get summarized content or translations on the fly.

References and Goodies

Access Prediction Guard LLM APIs
Intel BigDL for LLMs - Inference and Finetuning using LoRA
Intel Extension for Transformers - Accelerated LLMs on CPUs
Intel extension for TesorFlow - Optimized for CPUs and GPUs
Intel extension for PyTorch - Optimized for CPUs and GPUs
OpenVINO music Generation - Generative application using OpenVINO

Getting Started

Quickly integrate Intel's AI tools into your project with these code snippets for PyTorch, chatbots.

For example,

Intel Extension for PyTorch:

```
import torch
import intel_extension_for_pytorch as ipex
model = Model().eval()
data = ...
dtype = torch.float32  # torch.bfloat16, torch.float16 onl supported on GPUs

model = model.to('xpu') # `xpu` is the device name for GPUs, if using CPUs, use `cpu`
data = data.to('xpu')
model = ipex.optimize(model, dtype=dtype)
```

Intel AI Tools for Chatbots:

```
# pip install intel-extension-for-transformers
from intel_extension_for_transformers.neural_chat import build_chatbot
chatbot = build_chatbot()
response = chatbot.predict("Tell me about Intel Xeon Scalable Processors.")
```