

# Getting Started with the High Performance Computer at the Library Collaboratory

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If you have questions about anything in this document, please contact the Library Collaboratory Research Technology Officer Jimmy Tran ([q2tran@torontomu.ca](mailto:q2tran@torontomu.ca))

# Introduction

Hello and welcome to the TMU Library Collaboratory! This training document will guide you through the basics of using the High Performance Computer (HPC) at the Library Collaboratory.



The HPC's purpose is to supply you with the means of executing programs requiring high computational power. With the HPC, you may, for example:

- Process large amounts of numerical data from experiments
- Deploy and train small to medium Machine Learning (ML) models
- Edit high-resolution videos
- Render complex 3D geometries
- Run simulations

HPCS specifications:

Name:	Collab-PopXL
Central Processing Unit (CPU):	Intel Core i9 13900K
Graphics Processing Unit (GPU):	NVIDIA RTX 4090 (24GB VRAM)
Main Memory:	64 GB DDR5 6000 MT/S
Monitor:	LG 32GR93U 4K IPS Panel 144Hz

### Highlights of installed applications:

- Microsoft Office 365 (must use your own account)
- Autodesk Fusion
- Adobe Creative Suite (must use your own account)
- Drone2Map
- ArcGIS
- Bambu Studio
- DeepSeek R1 (all models up to 70B)
- Stable Diffusion
- jan.ai
- NVIDIA ChatRTX

There are more applications installed on the HPC which are not mentioned in the above list. When using the HPC, you may install your required applications. **Be mindful that every time you log off, the HPC is returned to its default settings.** This also means that your installed software will become uninstalled. You are required to log off every time you finish with your work. To save your work, it is recommended that you bring an external memory or you may email yourself your work. The software list is subject to change with the needs of Library Collaboratory members. If a member needs specific software installed for long term use, please contact our staff.

Before using the HPC, please reserve the time through the link below:

<https://calendar.library.torontomu.ca/equipment/item/32714>

Password: request from Library Collaboratory staff.

### Disclaimer:

Members who choose to download and install their own applications on the Collaboratory's computer do so at their own risk. The Collaboratory is not responsible for any issues arising from the installation. Members should conduct their own research on the security, reliability, and compliance of any application before installing it.

# Key Points for Using the HPC

- Computer will restore to default settings after it is reset, shut down, or the user logs off
- Ask the Colaboratory staff for the password
- All software and configuration changes of the HPC are reset after a hardware reboot
- Book the HPC via <https://calendar.library.torontomu.ca/equipment/item/32714>
- Use of the HPC for more than 24 hours is possible but please discuss this with Library Collaboratory staff in advance
- Make sure to bring external memory to save the data
- Work that you do on the HPC should be for academic purpose only
- When you finish your work, log off/shut down/reboot the computer