Georgia Tech

GTCOARLab

a learning environment for
learning reinforcement learning

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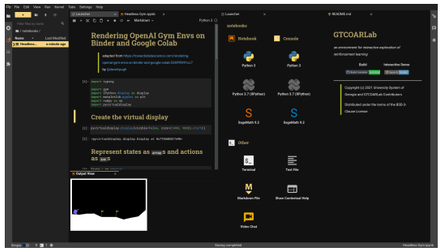
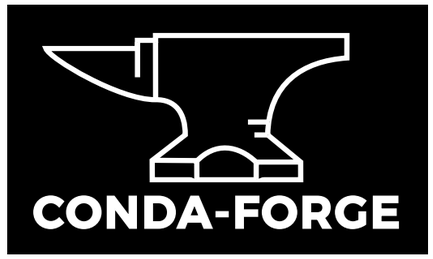
github.com/gt-coar/gt-coar-lab

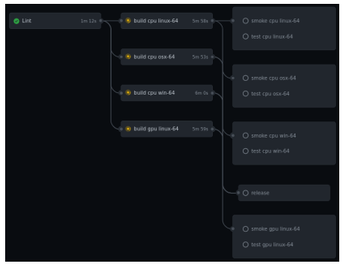
Mastery of advanced topics in scientific **computing** such as **reinforcement learning** can be made more **accessible** with **open source**, complete learning **environments** that increase **interaction** and **exploration** and reduce **setup**.



A novel learning experience including self-guided content-as-packages



GTCOARLab Linux (GPU) ships ~600 conda-forge packages



A generated workflow builds, tests, and releases 4 variants.

What We Learned

Interactive Computing

The **JupyterLab** interactive computing environment provides a composable baseline for building novel learning experiences including **Notebooks** and **Lab Extensions**.

Powered by Open Source

GTCOARLab is powered by the **conda-forge** ecosystem, and contains cross-platform distributions of key reinforcement learning tools such as **tensorflow**, **pytorch**, **gym**.

Continuous Delivery

Modern continuous integration practices such as **GitHub Actions** and **Binder** provide a platform for continuously delivering environments.

What We Shipped

gt-coar-lab

@gt-coar

Downloadable installers for Linux, MacOS and Windows.

jupyterlab-gt-coar-theme

@gt-coar

A JupyterLab theme with **dark** and **light** variants for delivering host institution **branding**.

jupyter-starters-reinforcement-learning-dennybritz-feedstock

@conda-forge

@dennybritz/reinforcement-learning as a conda package of Notebooks with tested dependencies, started with a single click in JupyterLab.

janki

@gt-coar

WIP

Create, review, and improve decks of **spaced-repetition** cards in JupyterLab.