

Budget Request: A computer with an adequate power supply for AI/compute tasks.

The Linux and Unix Users group has come into possession of several AI-capable workstation graphics cards, together valued in excess of \$500. For our members to use these GPUs for enriching compute tasks, we need a machine capable of housing them, the cheapest/best being a used Dell server tower.

Requested Total	\$413.00
Adjusted Total	\$413.00
Date Created	Saturday, November 23, 2024 1:34:32 AM
Submitted By	Rishi Krishna
Organization	Linux and Unix Users Group at Virginia Tech
Status	Submitted on Saturday, November 23, 2024 2:05:14 AM
Process	A) 2024-2025 RSO/USLP Funding - USS Appropriations

9 Sections, 1 Line Item

Section: Insurance

Please complete this section if your organization needs funding for insurance

Section: Operational Supplies

Please provide a description of the operational supply that your organization is requesting.

*Operational Supplies are any items with the potential to be used more than once in its lifespan, having an expected lifespan of less than 3 years, and integral to an organization's mission.

Section: Non-Event Specific Advertisements

Please complete this section if your organization needs funding for advertising (print, social media, other).

*All events funded by the Appropriations Committee must include an accommodations statement on all marketing and advertising materials for events.

Section: Banners

Professionally printed banners will only be funded for general organization logos/information and may not be event or date specific. Banners will be funded up to the following amounts:

- o \$150 per banner
- o Table covering will be funded up to \$150
- o \$25 for reprinting per banner

Section: Non-Event Specific Items or Equipment

1 Line Item / \$413.00

Please provide a description of the equipment/item that your organization is requesting. Equipment is any item with the potential to be used more than once in its lifespan and with a lifespan of more than three years.

* Please note you can add additional line items if necessary.

* These line items are NOT required. If you do not need one, don't use it.

<p>Dell T7910 24-Core 2.60GHz E5-2690 v3 32GB Equipment/Items (Expense)</p> <p>The Dell T7910 is a server/workstation chassis that supports modern RAM, mostly modern processors, and has a 1300W power supply.</p> <p>The RAM is expandable up to 1TB (which is a ton), and the Power Supply is enough to fit three or four high end graphics cards. If purchased, this would not only serve the immediate purpose of acting as a housing for our GPUs, it is future-proof enough that future generations of students can expand it for their own purposes.</p> <p>The version of this item we want can be bought used for ~\$385 (https://vtluug.org/users/~rsk/files/uploads/wanted.png), and we believe this is the ideal configuration and price.</p> <p>The only cheaper version to be had is ~\$255 (https://vtluug.org/users/~rsk/files/uploads/barebones.png), but does not include any CPU or RAM, the addition of which would close most of the price gap, and add additional hassle.</p> <p>Buying it on e.g. Amazon Renewed usually packages a weaker GPU than the ones we already own. (https://vtluug.org/users/~rsk/files/uploads/amazon.png) In this case, this unwanted addition inflated the price to ~\$530.</p> <p>After tax, the easiest/cheapest version (the ~\$385 one) is \$413.</p>	<p>1 x \$413.00</p>	<p>\$413.00</p>
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Section: General Programs & Events-Contracted Performer Fee

Please provide detailed information regarding the budget request for all expenses related to the performer (Performance fee, travel, lodging, and meals) . If all inclusive offer (preferred), please amount in Performance fee line item

- * Please note you can add additional line items if necessary.
- * These line items are NOT required. If you do not need one, don't use it.
- * When you create a line item, please use the Expense Category as the "Name" field, unless you're requesting a "Miscellaneous" expense.
- * All events funded by the Appropriations Committee must include an accommodations statement on all marketing and advertising materials for events.

Section: General Programs & Events - Event and Production

Please complete this section if your organization needs to rent tables and chairs (Event Services) or to utilize services from Production Services

Section: General Programs & Events -Publicity & Advertising

Please complete this section if your organization needs funding for advertising (print, social media, other).

- *No more than twenty percent (20%) of an overall program cost will be awarded for publicity and advertising costs
- *All events funded by Appropriations Committee must include an accommodations statement on all marketing and advertising materials for events.

Section: General Programs & Events - Miscellaneous

Please fill this section out if your organization will be requesting anything other than the previously listed items. Please make a new line item for every item being requested, unless it is a duplicate of the exact same item.

Additional Information

General Information

What is the full name of the organization submitting this request?

- Linux and Unix Users Group at Virginia Tech

What type of budget request are you submitting?

Operational Funding

Please note that whoever is filling out this request will be considered the primary contact, making them responsible for all communications relating to it. What is the VT email address of the primary contact?

- rishik@vt.edu

What is the mission of your organization?

- The Linux and Unix Users Group at Virginia Tech (VTLUUG) is dedicated to improving the computing skills of its members, supporting Linux and Unix use on campus, and serving the community through Free Software and open data. We host various services for on-campus students and members, including DNS adblocking, Linux shell servers, storage, password management, and more. Some of our services, like our wiki, are used by Virginia Tech IT Personnel.

Operational Funding

I am seeking funding for:

Non-event specific items or equipment

Operational Funding - Non-Event Specific Items or Equipment

How does this equipment/item work towards your organization's mission?

- As part of our mission, we run server infrastructure for our members to hone their programming and system administration skills. Thanks to a generous donation by one of our members, we have come into possession of several GPUs, most prominently an Intel Arc A770 and an Nvidia Tesla P100 -- both reasonable valuable, and capable of supporting many member projects. By purchasing this server, members will be able to run open-source AI projects, finetune their own AI models, utilize CUDA compute for mathematically-intensive projects, and more.

Has this equipment/item or similar item been previously funded by the USS Appropriations Committee in the past 3 years? *Reusable items with an expected life span of less than three years that are integral to the organization fulfilling its mission should be requested as non-event specific expenses

No

Is the equipment/item being requested for a specific event?

No

Where will your organization store this equipment/item?

- The Whittemore Server Closet, administrated by the ECE IT director, Bruce Buskill (bbuskill@vt.edu).

Is the equipment/item available through Virginia Tech, as a rental?

No

Why does your organization need this equipment/item, and how will it be used? *Please provide justification for why it is more cost-effective to buy vs rent.

- To run these GPUs (which are currently acting as expensive paperweights in our inventory), we need a server capable of powering them both: the best way to do this is by purchasing a used Dell t7910, which also supports high-performance processors and RAM, in addition to being highly upgradeable. If purchased, this machine could act as the club's compute server for the foreseeable future. It has a 1300 Watt power supply and four free PCIE slots, which is enough to run all of the GPUs we already have, with room for more in the future. Renting the GPU time to perform compute like this would incur an hourly price of around \$10 on the low end, which would obviously end up costing the club more after just a few days of use.

Request History

Saturday, November 23, 2024 2:05:14 AM - Rishi Krishna
Status: Submitted
