

Request for Technology Fee Funds: FY18

NOTE: A separate request should be made for each initiative.

I. Department Number/Department Name: 360 College of Computing

Title of Request (please be brief): Highly Parallel Proving Ground

Amount of Request (formula from detailed budget below): \$145,704

Are there any installation/renovation costs associated with this request? Yes No

If "Yes" then indicate the source of approved funding:

(Note: Tech Fees are not allowed for installation/renovation)

Executive Summary of Request (100 words or less):

There is a gap for parallel computing between instructor-led classes and sponsored research. Aimed mainly at graduate students but available to all, this proposal seeks to fill a need for a parallel compute system with which to tinker and learn.

Specific class and/or lab initiative(s) if applicable:

Contact person for this request (incl. phone #):

Will Powell (4-9301)

Indicate priority per department if applicable:

Number of

Indicate priority per college or unit:

Number 6 of 9

II. Impact on Students - Provide course title, course number, and anticipated enrollments:

Titles/Numbers of Course(s)

CS Graduate and Undergraduate Students

Anticipated Enrollments

| | |
|----------------|-------|
| Graduate: | 705 |
| Undergraduate: | 2,083 |
| Total: | 2,788 |

per sem per year
 per sem per year
 (select one)

NOTE: Other impacts on students should be described in narrative.

III. Narrative - Provide narrative justification for your intended use of the technology fee funds. Include narrative on how the education or research of the students will be enhanced. Also include how the request aligns with the Strategic Plan of Georgia Tech. Continue in the block below if necessary.

One of the core tenets of Georgia Tech's Strategic Plan is to "Inspire creative and entrepreneurial thinking"; however, we often see a lack of support for extra curricular education taking place outside the classroom. This type of self-led tinkering goes to the heart of that call to inspire creativity and strengthens students' abilities to think on their own, an important aspect of entrepreneurial thinking. As such, we propose to provide a modest parallel computing test environment at the College of Computing to fill this gap between instructor led classes and sponsored research. Such a resource would allow for personal development and education for students outside of class-directed tasks - tasks which are typically covered by a designated instructional resource -- that are also not appropriate for sponsored research systems. Akin to fabrication machines in our GVU Prototyping Lab, this tool would allow for self-driven experimentation with parallel computing techniques and fundamentals. This resource is aimed primarily at graduate students but would be available to all on-premise CS graduate and undergraduate students, upon request.

IV. Detailed Budget - Requested Items by Category List separately any equipment, software, and other allowable expenses (see Tech Fee Guidelines). There is a formula in the "total column" that multiplies the number of items times the unit price. You may enter a figure into the total column if the unit pricing is not applicable. If you need additional rows, contact the Budget Office to receive a modified form.

Supporting documentation is required - Include price justification in some form, such as quotations, published price lists, etc. as a separate PDF attachment. All supporting information should be in a single PDF.

| Proposed Number of Items | Estimated Price per Unit | Total (\$) |
|---|--------------------------|------------------|
| Dell PowerEdge R230 Server | 20 | \$3,836 |
| Cisco Nexus 93108TC-EX Pair | 1 | \$24,750 |
| Mellanox Infiniband EDR MSB78xx | 1 | \$23,616 |
| Dell PowerEdge R730 Server | 2 | \$10,306 |
| Total (linked to the total amount of request line above) | | \$145,704 |

Please return form via e-mail in Excel format to: techfees@business.gatech.edu. Supporting information only in a PDF file.

III. Continuation of narrative justification, if necessary

Empty rectangular box for narrative justification.