

## Request for Technology Fee Funds: FY20

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

I. Department Number/Department Name:

360	College of Computing
PACE-ICE Expansion to Extend Access to all Undergraduate Students	

Title of Request (please be brief):

Amount of Request (formula from detailed budget below):

\$19,100

Type of Proposal: Atlanta or Dist Lrng/Non-Atl

Atlanta
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Was this project request funded in FY19?

No (Yes or No)

Are there installation/renovation costs associated with this request?

No (Yes or No)

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

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

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**Executive Summary of Request (100 words or less):**

As High Performance Computing becomes more ubiquitous in industry and research, undergraduates entering the workforce with experience in HPC have a leg up. We propose to expand the College's investment in PACE-ICE to extend access to all College of Computing undergraduates.

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

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

David Mercer (404) 385-2518
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Responsible faculty for this request (incl. phone #)

Umakishore Ramachandran (404) 894-5136
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Indicate priority per department if applicable:

Number \_\_\_\_\_ of \_\_\_\_\_

Indicate priority per college or unit:

Number 8 of 9

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

Titles/Numbers of Course(s)

Computer Science and Computational Media undergraduates
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Anticipated Enrollments

Graduate:	0	(per	sem	) sem or yr
Undergraduate:	2,603	(per	sem	) sem or yr
Total:	2,603			

The estimated percent use of the resources in the item by:

Students	95%
Faculty	5%
Other	
Total:	100%

Brief explanation of how estimate was achieved.

Based on current enrollment in the CS and CM programs at the College of Computing. The resource will be used primarily by students in project work or self directed learning.

**NOTE:** Other impacts on students should be described in narrative to include benefits to the students affected.

III. 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. Software or data license proposals should indicate how many years the item has been funded through student tech fees in narrative.

**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 (\$)
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128GB Intel Compute node	2	\$8,300	\$16,600
1TB Storage for 5 years	5	\$500	\$2,500

Total (linked to the total amount of request line above)

\$19,100

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

**IV. 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. To include curricular, co-curricular, and extracurricular benefits expected to accrue to students through provision of this resource, including students outside the unit. Briefly state how information regarding similar technology use elsewhere on campus to benefit from lessons learned, to standardize, or differentiate, and to avoid duplication. Also include how the request aligns with the Strategic Plan of Georgia Tech.

Beginning in 2016, the College of Computing and OIT-PACE joined forces to build an advanced shared educational computation cluster - PACE-ICE (Instructional Computing Environment) - to address the growing number of HPC resources requested by classes in the College of Computing and the School of ECE. Leveraging the PACE team's expertise in delivering High Performance Computing (HPC) resources, along with investments from OIT, College of Computing, and Tech Fee grants, we have created a campus resource that serves as a model that other departments can join with their own educational funds. PACE-ICE is currently being used by courses in CS, CSE, ECE, and Math.

Georgia Tech's strategic plan sets goals to be among the most highly-respected technology-focused learning institutions in the world and to sustain and enhance excellence in scholarship and research. With this directive in mind, we propose to create a small 'general access' pool of computational resources that will be accessible to all College of Computing undergraduates. This will give curious undergraduate students an HPC resource that can be used for capstone coursework, or just self-directed learning. We believe that this plays directly into the Institute's other strategic objective to prepare our students for global leadership, as well as helping to inspire creative and entrepreneurial thinking. As HPC become more ubiquitous in industry and research, equipping our undergraduates with hands on experience with these tools become increasingly important to maintaining Georgia Tech's position as a global leader.

