

## Request for Technology Fee Funds: FY21

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

I. Department Number/Department Name:

360	College of Computing
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Title of Request (please be brief):

Exploratory Visual Analytics Lab
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Amount of Request (formula from detailed budget below):

\$118,860
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Type of Proposal: Atlanta or Dist Lrng/Non-Atl

Atlanta		
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Is this request similar to one funded in FY19 or FY20?

No	(Yes or No)
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Are there installation/renovation costs associated with this request?

No	(Yes or No)
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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):**

This proposal is to build an immersive Exploratory Visual Analytics lab to use in data visualization and interpretation. The proposed system would cover the main wall with 30 (10 x 3) 55" conference room monitors and the side walls with 12 (4 x 3) each.

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

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

Will Powell, 404-894-9301
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Responsible faculty for this request (incl. phone #)

Srinivas Aluru 404-385-1486, Will Powell 404-894-9301
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Indicate priority per department if applicable:

Number		of	
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Indicate priority per college or unit:

Number	8	of	9
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II. Impact on Students - Provide course title, course number, and anticipated enrollments:

Titles/Numbers of Course(s)

CSE 6040, 6141, 6240, 6242, 6730, 6740
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Anticipated Enrollments

Graduate:	1,570	(per	yr	) sem or yr
Undergraduate:	0	(per	yr	) sem or yr
Total:	1,570			

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

Students	80%
Faculty	15%
Other	5%
Total:	100%

Brief explanation of how estimate was achieved.

Intention is for this space to be used to further the education of Graduate students in Computation Science and Engineering

**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 (\$)
Dell 55 4K Conference Room Monitor - C5519Q	44	\$1,150
Dell XPS Desktop with NVIDIA GeForce RTX 2060 GPU	24	\$1,700
Chief Large Fusion LSA1U Fixed Wall Display Mount	42	\$130
S&H and miscalleneous accessories (speakers, cabling, switch)	1	\$14,500
Dell Precision workstation w/3 monitors	1	\$7,500
<b>Total (linked to the total amount of request line above)</b>		<b>\$118,860</b>

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.

We believe that Virtual Reality and immersive digital spaces will continue to evolve as robust tools to use to explore data science as well as other, analytical uses.

Coda's room C1206 (42'x19') was originally envisioned as such a space and that is where we propose this equipment be installed.

The system will be a grid of 55" displays surrounding an audience or person exploring various data-driven visualizations and information. The system might also be used for immersive content like map exploration or other uses. The main wall will be a 10 x 3 array and the side walls will be 4 x 3. Similar projects have recommended buying a few spare monitors with the bulk purchase to make sure any defective displays have suitable replacements without compromising the continuity of the array.

We believe building such a room will inspire our students to discover new ways to analyze, observe, and think about the world. We believe that being surrounded by data and the scale of such a facility would bring new insight and inspiration.

The basic design builds upon similar systems elsewhere, such as "Stallion" at the Texas Advanced Computing Center. The array would allow us to study the Massive Pixel Environment library and DisplayCluster software to orchestrate the use of the displays.

It gives Georgia Tech students the first of what we believe will be many immersive, large scale room on campus to experience information science in exciting new ways.

