

## 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
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Title of Request (please be brief):

OMSCS Advising and Anti-Cheating Tools
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Amount of Request (formula from detailed budget below):

\$9,950
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Type of Proposal: Atlanta or Dist Lrng/Non-Atl

Dist Lrng/Non-Atl
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Was this project request funded in FY19?

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)*

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

As interest and enrollment has grown in the Online Masters of Science in Computer Science, the dedicated advising team has been struggling to keep up. We propose to purchase a few key pieces of software to enhance their ability to work with the growing enrollment of OMSCS Students.
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Specific class and/or lab initiative(s) if applicable:

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

Andrew Leonard (5-2805)
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Responsible faculty for this request (incl. phone #)

Reina Grundhoefer, Thad Starner
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Indicate priority per department if applicable:

Number      of     

Indicate priority per college or unit:

Number   1   of   5  

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

Titles/Numbers of Course(s)

OMSCS Students
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Anticipated Enrollments

Graduate:	8,656	(per <table border="1" style="display: inline-table; width: 20px; height: 15px;"></table> sem )	sem or yr
Undergraduate:		(per <table border="1" style="display: inline-table; width: 20px; height: 15px;"></table> )	sem or yr
Total:	8,656		

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

Students	25%
Faculty	25%
Other	50%
Total:	100%

Brief explanation of how estimate was achieved.

Software will be used predominantly by the College of Computing OMSCS Advisors in their work supporting the OMSCS Students, and the faculty in charge of anti-cheating initiatives.
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**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 (\$)
Flipping Book Online Advanced per year	1	\$2,150
Docusign eSignature Plan (Business Pro) per user, per year	10	\$480
Amazon Web Services for Jack Watson	1	\$3,000
		\$0
		\$0
<b>Total (linked to the total amount of request line above)</b>		<b>\$9,950</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.

As interest and enrollment has grown in the Online Masters of Science in Computer Science, the dedicated advising team that serves our OMSCS students has been struggling to keep up with the demand while using the tools that worked for so many years with our traditional Masters and PhD programs. In collaboration with the OMSCS advising team, we have selected a suite of softwares that will allow this growing group to perform their work at the increased scale demanded by the almost 9000 enrolled students. The softwares are described below -

**FlippingBook**

FlippingBook turns a PDF into an interactive flipbook with a smooth page flip effect, comfortable in-document navigation and customizable design. All of these features are backed by HTML5, which means the resulting document works in any browser without the need for any special viewing software. FlippingBook is currently in use at GTHR to create curriculum documents, and the advising team would like to use it to create better orientation documentation that is more engaging and interactive - and therefore more likely to be read and understood.

**DocuSign**

The global enrollment in the OMSCS Program has lead to the realization that we need a cleaner, more robust solution for signing all the documents surrounding enrollment and advancement within the program. Using a service like DocuSign to complete approvals and agreements, will allow us to get digital signatures in minutes or hours—not days—from almost anywhere in the world, and will allow the Academic Advising team to go almost entirely paperless.

**Jack Watson**

Attaining a Masters Degree can allow CS professionals to increase their income by tens of thousands of dollars a year. Unfortunately, this high reward can sometimes incentivize academic dishonesty. One particularly difficult form of plagiarism to catch is students using freelancing websites to find third-party programmers to do their homework on their behalf. To fight this, the Jack Watson team has built an Artificial Intelligence and Natural Language Processing system to monitor 'homework for hire' websites for suspicious posts, automatically interact with the authors of these posts using a chatbot, and notify teaching assistants and professors about posts that likely belong to students in their courses. Jack Watson is hosted using Amazon Web Services (AWS) running periodic web scraping jobs from an EC2 instance to find newly posted projects on the most popular of these websites. AWS also has many features that could prove useful in the future - hosted elasticsearch; using a job queue for scraping; ability to easily spin up multiple workers with different IP addresses to avoid detection.

