

#### The Problem

In today's evolving world, every student needs to know computing. Unfortunately, there are not enough teachers qualified to teach them. This problem is exacerbated in low-income and rural communities where schools do not have access to the resources needed to offer computer science.

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The Constellations Center for Equity in Computing at Georgia Tech was created

to ensure that all students—especially students of color, women, and others underserved in K-12 and post-secondary institutions—have access to quality computer science education, a fundamental life skill in the 21st century.

#### **How We Help Our Students**

- Access to a sequence of high-level online computing courses
- Customized support for students to complete assignments and projects
- Connections to post-secondary opportunities and internships

#### **How We Help Our Teachers**

- Access to teacher resources fully aligned to each course
- Summer professional development opportunities
- Customized, on-demand online teacher support

## **The Constellations Difference**

"Until Constellations came to our school I had never done any kind of computer science and had pushed it off as something that was really hard and probably would never understand. Mrs. White (Constellations fellow) breaks it down really well and has helped me not only learn binary and other cool stuff, but that anything is possible."

- Akiem Williams, Senior, Mays High School

#### You Can Make a Difference

Our education system is broken and the result is kids who are unable to compete with the evolving job market and create a better life for themselves. Our initial reach and funds can only go so far, and we would love for you to be a part of our goal of **raising \$5 million**. With your support, we can do immeasurably more to give kids in our community the opportunity to be more than they thought possible.

#### **Our Impact**

We're dedicated to the development of a sequence of online computing courses that lead to post-secondary studies in CS. Teachers new to computer science will be supported and prepared to facilitate each course. Contesting issues of race and poverty, students completing these courses will be prepared for real-world experiences and higher learning opportunities. This is how we obtain equity in computing.

#### **Contact Constellations**

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# **Fast Facts and Figures**

on Computer Science Education and Constellations Center for Equity in Computing at Georgia Tech

## **Computer Science Education Landscape in Georgia**

In 2017:



Teachers certified to teach in Georgia



528,004

Students in Georgia Public Schools



3,856

Students who took the AP Computer Science exam

Only two high schools offered Advanced Placement computer science courses in the Atlanta Public School district, meaning approximately only 4 students were able to access advanced computing courses. In the 2018-2019 school year, Constellations has tripled student participation and the number of trained teachers went from zero to six.

# **Constellations by the Numbers**

By raising \$5 million Constellations will be able to do the following:

- Double the number of Constellations fellows on our team. (\$2.2 million over four years)
- Create three different computer science courses with our hybrid online instructional model and provide excellent support for teachers and students. (\$1.1 million over four years)
- Expand our curriculum to 10+ schools in the next year, further increasing access to students in underserved communities.Constellations currently works in the Atlanta Public Schools district. In the near future, we will be able to scale our work in this district to partner with low-resource schools across Georgia and ultimately throughout the country. (\$900,000 over two years)
- Recruit and retain world-class executive leadership and support staff team members and support other center expenditures. (\$800,000 over two years)

