Constellations Center for Equity in Computing

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The Basic Problem

• There are not enough CS teachers

• The economy is directly dependent on people with computing skills

• Most students are left out especially students of color

• Computing is increasingly required for survival in any facet of American life

Our Strategy

• Develop and deploy hybrid computing courses

• Integrate Georgia Tech computing courses into high school curricula across the state

• Develop a public argument for equity in computing
Historic inflection point

Source: Georgia Tech IRP
Equity: Atlanta in Black and White

Equity is not the same thing as equality.

**White Atlanta**
- white pop > 78 percent
- black pop < 7 percent

**Black Atlanta**
- black pop > 65 percent
- white pop < 14 percent
Equity: College and Poverty

Percent of pop 25 years plus with bachelors degree or better, 2016

Source: Neighborhood Nexus
The Computing Problem: Students in 2017

<table>
<thead>
<tr>
<th>528,004</th>
<th>238,951</th>
<th>3,856</th>
</tr>
</thead>
<tbody>
<tr>
<td>high school students in Georgia public high schools</td>
<td>in the 11th and 12th grade</td>
<td>took an AP CS exam in 2017</td>
</tr>
</tbody>
</table>

1.6 percent
The Computing Problem: Teachers in 2017
Computing and the Color Line

High School Demographics

- Asian: 4
- Black: 16
- Hispanic: 38
- White: 41

AP CS Demographics

- Asian: 28
- Black: 10
- Hispanic: 9
- White: 48

Source: [Georgia Department of Education](https://www.gadoe.org)
Atlanta Public Schools is Representative
# Structural Isolation in APS

The isolation of Black students is built into the structure of the school system.

## APS High School - Student Distribution by Race

<table>
<thead>
<tr>
<th>APS High School</th>
<th>Black</th>
<th>White</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mays</td>
<td>1,477</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>Washington</td>
<td>699</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Therrell</td>
<td>793</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>South Atlanta</td>
<td>747</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Carver</td>
<td>575</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Crim</td>
<td>122</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Douglass</td>
<td>895</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BEST/CSKYWLA</td>
<td>731</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grady</td>
<td>625</td>
<td>523</td>
<td>107</td>
</tr>
<tr>
<td>Jackson</td>
<td>997</td>
<td>111</td>
<td>61</td>
</tr>
<tr>
<td>North Atlanta</td>
<td>723</td>
<td>628</td>
<td>433</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8,384</td>
<td>1,262</td>
<td>700</td>
</tr>
</tbody>
</table>
Alliances are critical because…

...equity is a matter of structure.