Weaving Diversity and Inclusion into CS Content

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Introductory CS courses often present computational concepts in a multitude of varied contexts. The contents of these examples and assignments present an untapped opportunity to reach out to under-represented minorities. For CS in particular, the ubiquity of technology in modern society makes it imperative that students consider how seemingly innocuous technical decisions could selectively disadvantage particular populations. If the entirety of the CS community - from K-12 to industry - is to be inclusive, we must train students to be aware of these issues from their first CS course.

This BOF aims to foster discussion of how examples and assignments can illustrate CS concepts and simultaneously acknowledge the challenges that under-represented students may be facing. At least three such avenues are possible: 1) Choosing multi-cultural contexts for homework questions and in-class examples; 2) Assigning projects with socioeconomic implications, such as the Schelling Segregation Model (a 2014 Nifty Assignment); and 3) Showing how inclusion is easily subverted by majority-Caucasian data sets or "purely technical" decisions such as representing gender with a Boolean. The long-term goal is to establish a network of instructors interested in contributing assignments and activities, and to create a resource suitable for broader dissemination in the future.

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