

2020 Summer Professional Development
Culturally Responsive CS Education

Online Course Description

The *Culturally Responsive CS Education* is designed to help educators prepare for teaching computer science. The course addresses the content and pedagogical challenges of teaching computer science with an emphasis on culturally responsive teaching. Attendees will explore algorithmic biases and learn about artificial intelligence and machine learning (ML). The course has a hands-on coding component where the attendees will use HTML, CSS, Javascript, and Google's Teachable Machine to train an AI and share it with the world.

Support

- Get email support by contacting hello@popfizz.io or post questions on the [Forum](#).

Course Overview (12 hours)**Module -1. The CS Education Landscape and equity – 2 hours**

1. What is culturally responsive teaching?
2. CS standards and addressing the equity issue in the classroom

Module -2. Computational Thinking- I – 2 hours

Computational Thinking Exercises

Module -3. The Teachable Machine Part -1: HTML + CSS – 3 hours

Getting started with the Teachable Machine Project with HTML + CSS

Module -4 – The Teachable Machine Part -2: Javascript – 3 hours

Javascript projects

Module -5 – The Teachable Machine Part -3: Machine Learning - 2 hours

What are artificial intelligence and machine learning?
Algorithmic biases
Teaching AI
Final Project: The Teachable Machine Project