

Code Beats

Using hip hop music to teach computer programming

With technology touching nearly every aspect of our society, it is essential that all students acquire skills and knowledge in computer science (CS). Unfortunately, availability of classes and interests from students is still limited due to a low presence of CS in K-12 education. To address this challenge, we have developed a system which uses hip hop music to teach basic computer programming skills.

Our Online Camp

Our three-week long online camp teaches students to code as they make hip hop beats. Each weekday from 10-11am we broadcast live to them, teaching the day's lesson, hosting virtual guests like NO BS Brass's Taylor



Barnett or rapper Nickelus F, interacting with students via live chat and online voting, and making sure students are prepared to complete the day's lesson. At 11am, we release the day's assignment. Assignments are designed to *require* only 15 minutes of time, but many students spend hours making their beats spectacular. We share some students' beats in class the next day. At the end of the three weeks we hold a beats competition, where students compete in a March-Madness-style bracket to see who can create the best beat. This camp has an emphasis on FUN!

Benefits

- » Increases CS knowledge, skills, and engagement
- » Increases awareness of CS careers

What:

Three weeks of cheap (\$25), introductory classes on making hip hop beats with code.

When:

May 4th to May 22nd, with 1 hr sessions at 10am each weekday.

Where:

Online and live streamed via Twitch.tv.

Requirements:

Computer (Windows or Mac), headphones, Twitch account.

Recommended ages:

11-15 (middle school - 9th grade)

Professors:

- David Shepherd, Ph.D.
- Douglas Krug, M.S.
- Taylor Barnett, Ph.D.
- Kate Sicchio, Ph.D.
- Nickelus F

Undergrad Instructors:

Edtwan Bowman

Register:

Sign up for the newsletter (low traffic) to be notified of the details, including how and when to sign up for this camp:

<https://bit.ly/registerCodeBeats>

Buy a one-month, \$25 subscription (starting May 1) to the davidcshepherd Twitch channel: <https://www.twitch.tv/davidcshepherd>