Personalizing Learning with Innovative Feedback Methods

Teaching Innovation Conference
Christopher Policastro
Automated Grading

- JupyterHub
- nbgrader
- Gradescope
Grading on JupyterHub

- Assignment Version
  - Instructor
  - Student
- Question Type
  - Automated Grading
    - Code
    - Charts
  - Manual Grading
    - Text
Distribute Feedback
  ◀ Comments
  ◀ Solutions
  ◀ Scores
▶ Connect to Learning Management System
Meet the Secret Algorithm That’s Keeping Students Out of College

The International Baccalaureate program canceled its high-stakes exam because of Covid-19. The formula it used to "predict" scores puzzles students and teachers.

Unreadable
• Closed-Source

Flawed
• Cheating

Breakable
• Bugs
Automatically grading programming homework

Software that identifies errors in students’ programs — however idiosyncratic their approaches — could be a boon for online learning.

Larry Hardesty, MIT News Office

Researchers at MIT’s Computer Science and Artificial Intelligence Laboratory (CSAIL), working with a colleague at Microsoft Research, have developed a new software system that can automatically identify errors in students' programming assignments and recommend corrections.

Teaching assistants at MIT have already begun using the software. But some variation on it could help solve one of the biggest problems faced by massive open online courses (MOOCs) like those offered through edX.