"There's no right answer"

open-ended discussion and interpersonal skills in computing classrooms
Broadening Participation in Computing

Training TAs in Computing Courses

1. have technical skills
Broadening Participation in Computing

Training TAs in Computing Courses

1. have technical skills
2. will get experience
Broadening Participation in Computing

Training TAs in Computing Courses

1. have technical skills
2. will get experience
3. need interpersonal skill support
Broadening Participation in Computing

goal: increase sense of belonging in computing courses for all students
Broadening Participation in Computing

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goal: increase sense of belonging in computing courses for all students

Back of the envelope numbers (Fall 2022):

DS 2000 - 480 students, 42 TAs, 2 professors
CS 2500 - 773 students, 90 TAs, 6 professors
Broadening Participation in Computing

The primary location of one-on-one interaction is happening between students and TAs.
Broadening Participation in Computing

The primary location of one-on-one interaction is happening between students and TAs.

Computing courses don't typically focus on developing interpersonal skills.

Professors in computing typically teach classes where activities and prompts have a specific, set answer.
The primary location of one-on-one interaction is happening between students and TAs.

More welcoming TAs → more welcoming environment → more humanists with technical skills, computer scientists with interpersonal skills.
Train the TAs ([https://cic.northeastern.edu/ta-training/](https://cic.northeastern.edu/ta-training/))

Khoury hires ~700 TAs a semester

Training program focuses on interpersonal skills with technical grounding
Train the TAs ([https://cic.northeastern.edu/ta-training/](https://cic.northeastern.edu/ta-training/))

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Initial results:

- computing faculty are less comfortable teaching modules centered around open-ended discussion and topics "outside" of computing
Train the TAs ([https://cic.northeastern.edu/ta-training/](https://cic.northeastern.edu/ta-training/))

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Initial results:

- computing faculty are less comfortable teaching modules centered around open-ended discussion and topics "outside" of computing

  ![Introduction to intersectionality](#)

- this is the module that has received the most positive feedback from TAs in the training
Okay, but what does this have to do with ethics and AI?
Integrating Ethics in NLP

Also relies on computing students' "soft" skills

1. Homework with ethics questions
Integrating Ethics in NLP

Also relies on computing students' "soft" skills

1. Homework with ethics questions
2. Lectures on bias and ethics in NLP
"what is a word" and "how big is my vocabulary?"

1. Students write their answers
2. Students read the essay answer that ChatGPT produced given the same prompt
3. Students critique ChatGPT's response
4. Students make an argument for whether or not ChatGPT should be allowed as a citable resource
Should ChatGPT be allowed as a citable resource?
Pedagogy of Large Language Models
Pedagogy of Large Language Models
Pedagogy of Large Language Models

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Technical Users

Non-technical Users

Developers

Critical Reasoning and Soft Skills