

## Teaching Statement

Teaching is a craft that I iterate on, driven by specific goals and an evolving philosophy. My overarching goal is to spark intrinsic motivation and curiosity in my students. I use hands-on projects and real-world examples in my teaching and involve students in curriculum development to create engaging course content.

I used project-based learning for the majority of my teaching at American YouthWorks (AYW) YouthBuild vocational training program. I facilitated a program where students learned about computer hardware by refurbishing computers in a partnership with the City of Austin's Digital Inclusion program. My students also learned about project management and graphic design by completing screen-printing projects for non-profit clients. By troubleshooting issues that arose in these projects, students learned to solve the kinds of setbacks that inevitably arise in creative problem-solving situations. Students also cultivated ownership and a sense of craftsmanship over their work through these projects. I aim to instill this in the college students I teach now, who learn to apply documentation to their own needs and master debugging strategies. As a TA for CU Boulder's Fundamentals of Human-Computer Interaction and Introduction to Computational Thinking courses, I push students to consider not just whether their code solves a problem, but also the projects' accessibility, usability and ethical implications.

Another method I use to motivate students is connecting course content to their lives outside of class. One of the exciting things about my subject areas of design and computer science is that they can be applied to such a wide variety of disciplines. I encourage students to integrate their own interests into what they're learning in class, creating assignments that are flexible enough for students to have freedom to do so. For example, I gave students the option to choose their own graphic design project in my AYW class. One student designed a logo and artwork for a fantasy card game she had created in her free time. Another designed skins for her favorite video game. I also integrate real-world problems into content to be relevant to students. I developed a programming assignment in which students create a content moderation system for a social media platform, compelling them to practice technical skills like file input/output, keyword matching with regular expressions, and functions, as well as reflect on how their system design affects users and consider how social media platforms they use deal with similar challenges.

I get to know students, in order to better understand how to make content relevant for them. On the first day of the lab I teach for CU Boulder's Introduction of Computational Thinking course, I asked students to develop an algorithm to sort themselves into groups based on their majors and why they are taking the class. The exercise got students to share a bit about their motivations and personality with me and the rest of the class, as they created the algorithm and analyzed its efficiency as a team. In the spirit of inclusive design, I find ways to "design with, not for" when creating lessons and assignments. In my research, I evaluate and brainstorm curriculum through focus groups with students. Based on their feedback, I supplemented lecture slides and clarified the assignment instructions for areas that students identified as challenging. I also generated

a bank of assignment ideas from these focus groups, collaborating with students to formulate ideas around tech controversies they feel affected by.

Activities like developing and acting out an algorithm as a group build a supportive learning environment, another key element of my teaching philosophy. I translate community building activities I used while teaching at American YouthWorks to the college environment, where students need to feel comfortable making mistakes and asking questions in order to learn. I take simple actions to build relationships, like asking students to share something good from their week in the wait time before class starts. I also contribute to more involved efforts to support students, like using a restorative approach to resolving conflict, talking through issues rather than resorting to punitive measures.

I treat teaching as a craft that I continuously improve. To formally hone my skills, I participate in workshops run by CU Boulder's Center for Teaching & Learning, am completing the university's Certificate for College Teaching, and journal about my class objectives and outcomes before and after labs. I speak with students about how class is going in person, which creates a dialogue so I can ask for clarifications on their feedback, and gives me a chance to improve my practices before I receive formal mid or end-of-semester evaluations. Because I build relationships with my students, they are comfortable telling me how I can improve when I ask them for feedback. I also take into account feedback I have received from fellow teachers. I co-taught some of my class at AYW and regularly discussed improvements with my co-teacher, and have reviewed video-recordings of my recitations at CU with the lead TA. The work I put into my teaching pays off. Through teaching, I learn new ways of thinking, expand my own skills and gain a broader and clearer picture of the subject by explaining it to a variety of learners.