

1. Briefly describe your research (as simply as possible). What problem is your research trying to solve and why does it matter?

My research is in human-computer interaction, a field that focuses on understanding how technology influences people. I'm starting to build up my lab here at NUS, named the palette lab (<https://ejane.me/palette/>). The name takes inspiration from an artist's palette, where like the different colors of paint come together and mix, the work in our lab aims to bring together and center diverse perspectives, disciplines, lived experiences, and forms of expertise, particularly those that are often overlooked in technology design.

My lab studies how people create, learn, and make decisions when they use technology to support their work. Many tools are designed to support human productivity. We're especially seeing these days how much AI is being used to *do things for people*—writing, designing, or deciding on their behalf. While this might be more “efficient” or “productive,” it risks reducing people’s understanding, creativity, long-term skill development, and most importantly, autonomy.

Our work asks how we can design AI systems that *help people grow their own expertise* instead of replacing it. Our lab studies how tools can guide attention, encourage reflection, and support learning across domains such as education, creativity, accessibility, and healthcare. We aim to build systems that empower people, respect diverse ways of knowing, and strengthen—rather than erode—human agency, participation, and voice.

2. Who or what sparked your interest in science? Was there a defining moment that set you on your current career path?

My mom has always been an inspiration to me and made STEM feel like a space where women truly belong (though I do still forever feel the imposter syndrome). She holds a master's degree in both Mathematics and Computer Science and has built a career spanning software development, scientific book publishing, research in civil and environmental engineering, and, most recently, AI curriculum development. Through her path, she has shown that it is possible to have a meaningful and impactful career (and across so many different fields), all while being extremely present and available as a mom.

More impressive than her career achievements, my mom is someone who completely radiates love, care, and dedication. She chose to step away from the workforce for five years each for both my sister and me. For me, this actually meant giving up her PhD in Mathematics. Recently, she even flew here on

extremely short notice to support me as I find my footing as a new professor in a new country.

What is most special about her career trajectory is that she showed us that STEM does not have to be only about technological advancement. She brings the same care that is central to who she is into her work in countless ways. One story she recently shared illustrates this beautifully: while working in book publishing, her appreciation for an author's child's artwork—and her advocacy for it—led to a collaboration in which that artwork was used for the book's cover and chapter dividers.

I hope to similarly find ways to center this kind of care in my own career.

### 3. How do you hope to inspire the next generation of women in STEM?

My mentor from my very first research internship at Adobe, Floraine Berthouzoz (<https://www.floraine.org/>), continues to be my inspiration—as a researcher, as a mentor, as a person. I hope to carry forward her spirit and share her inspiration with others.

Floraine was an extraordinary mentor. She was also known for giving young students a chance to try research; I don't know what she saw in me, but she gave me such a chance as a first-year PhD student with minimal prior research experience and I'm incredibly grateful she did. Because of that opportunity, I was able to get to know her which is something I treasure, because she unexpectedly passed away during that summer. I still remember after our very first in-person meeting, I immediately called my parents to tell them just how excited I was to have met her and how lucky I was to be her intern. I was so excited for the summer, and already hoping to continue working with her throughout my PhD.

Floraine was someone who actively fought for gender equality in education around the world. She also loved to travel, she traveled widely and met locals, learn about their culture, and often shared this vision of a more inclusive future. (I wonder if she knew about this day in Singapore, if she did, I know she would've loved it!) At the time of her passing, she had been remotely mentoring female students in Afghanistan, and her next trip planned was to visit them in person.

Throughout her career, Floraine created spaces where women could both enter computer science in less intimidating ways and build community with one another. She helped launch initiatives such as CS KickStart, the Stanford-Berkeley Women in CS/EE Research Meetup, and the SIGGRAPH

Women's Lunch (which we have now renamed the Berthouzo Lunch in her honor). Beyond any single program, she naturally fostered a community among her mentees—around mutual support, shared values, and our shared deep respect and admiration for her care and for the powerful, spirited presence she brought to everything she did. I hope that through my own mentorship, I can help to continue her legacy and extend her commitment to care, equity, and empowerment.

In her honor, researchers at Adobe established the Adobe Women-in-Tech Scholarship to allow undergraduates to be exposed to research early (my sister actually received this scholarship). During a later internship, I had a chance to informally mentor a few of the scholarship recipients, and most recently learned that one of my recent collaborators was actually a recipient of this scholarship. These moments continually remind me of the far-reaching impact Floraine had, and I hope that sharing her story helps inspire and encourage other women in STEM.

#### 4. What advice would you give to girls and young women who are considering a career in STEM?

Take time to pause and reflect so you can figure out what you are genuinely excited about, and when you find that, ignore what societal norms say about what you can and can't do.

Don't be afraid to ask for what you need, and don't feel "weak" because you need it. I struggle with anxiety, and over time I've learned to accept that I might need a bit more external validation than most. I've found mentors and supporters (my advisor, James Landay, being a core one) who encourage me and remind me of my worth when I can't—I even ask my partner for nightly affirmations ;). Don't be afraid to go and find these people to be in your corner when you need them (For context: my thesis acknowledgements are twelve pages long).

And don't be afraid of faculty—I almost never went to any office hours in undergrad, so please don't be me. Many of us chose these jobs over (often higher-paying) industry roles to work with and support students.