

National Academy of Engineers Grand Challenge Scholars

Advancing Personalized Learning

Shannon Lue Chee Lip

Overview

As we move towards a more decentralized, personalized mode of learning, it is important to understand both the functional goals of the traditional education experience as well as the hidden mechanisms by which we internalize ideas and culture. Through my GCSP experience, I have examined the lifecycle of ideas from creation to various modes of dissemination and worked to understand not just how we internalize new ideas but how we learn what is untaught.

Research

As a humanities major, research looks different for me than many other Grand Challenge Scholars. Through the Humanities Center's Meliora Scholars program, I was able to spend three years conducting independent research on Caribbean literature. My project explored notions of cultural loss and ancestral absence as a direct result of colonization and slavery. This helped me understand unseen mechanisms through which we internalize cultural norms and practices. It illustrated the chains of influence behind learning and ways in which members of a given society passively absorb information.

Service

Through my Grand Challenge experience, I learned a huge number of practical skills that will undoubtedly help me in my future career. I implemented a number of these skills by volunteering to consult with small nonprofit organizations. Normally, smaller NGOs are unable to access consulting services due to the high costs and impracticality of hiring corporate firms to solve nonprofit industry issues. I was able to help them boost their fundraising metrics and better understand how to tailor their messages to their various audience segments through brand strategy workshops and business analysis. Learning to implement my skills like this was incredibly valuable to my Grand Challenge as it helped me to understand not just the importance of personalization to learning but the various mechanisms through which organizations can improve an individual user's experience through advanced targeting and segmentation.

Interdisciplinary

In Spring 2020, I combined my marketing, anthropology and religion education in a truly interdisciplinary effort to analyze the language employed by a number of tweets from various global social movements. I focused specifically on the linguistic features of calls to action in these tweets and found that there are distinct parallels between the language used for radicalizing groups to collective action and language used on similar platforms for educating online audiences about social causes.

Global

As an international student, maintaining a global perspective has been important to me. I took a variety of International Relations, Political Science and Philosophy courses to learn how different cultures approach education. This, alongside my Computer Science courses, helped me understand universal design and expanded my knowledge of what it means to learn in diverse communities.

Entrepreneurship

Through the Kaboom! Play Everywhere grant, I was able to exercise my entrepreneurial skills as my team at iZone collaborated with local community partners to create a new play space for children in an underserved area of Rochester. I've worked at iZone since September of my freshman year and all of the projects and programs I have worked on have been aimed at promoting a culture of innovation and creative confidence among undergraduate students. The Play Everywhere initiative fully encapsulates these goals and helped my progress towards understanding my Grand Challenge through a practical examination of how we transmit ideas of play, innovation and inclusivity through physical spaces and teach innovative mindsets implicitly to our users.