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The economy of today revolves around information. The synergy of cheap storage, distributed processing, and granular data pulls information off the page and feeds it into a network to drive what we build, what we see, and how we make decisions. With such tight feedback loops, time is compressed and deployed on human targets.

The people who build what we use, choose what we see, and influence how we make decisions are not responsible for considering the sustainability of their pursuits, the environmental impact of their logic, and how it shapes our experience of, and participation with, the world. Today, the things we cannot see can make choices about the way we live before they even enter our realm of awareness. Human problems have started to be built into algorithmic logic itself: inscription errors of unconscious human bias. These problems of stewardship that stem from the practice of computation are the ones I hope to explore in Harvard's Design Engineering program.

It has been a slow unravelling. I initially made the decision to pursue architecture because I liked, and was good at, graphic design. I hoped it would, in being a licensed profession, pay back my parents' sacrifice while allowing me to explore my love for aesthetics. I didn't expect to fall so violently in love with a body of knowledge, the theory of architecture itself.

What is architecture? From where do we have the built environment? And most importantly, what is the architect's role? The complexity of my broken intergenerational history gave me a sense of ethical responsibility for the design of objects from which there is no escape. I could not unlearn. While my parents may not have approved of architecture's employment rates in 2011, they were also refugees of a genocide. They know what it was like to dig ditches during the day and wait for your name to be called at night. They know what it means to not have a choice in how much you could eat the next day, whether your sister would live, or where the next B-52 would land. They know pain, fear, and what it means to be unable to escape. And they also know the importance of people, reciprocity, and trust. I relive these stories in everything I design, everyday.

Stadia projects embody the imbalanced negotiation of political and personal choices. For these reasons and others, I worked in the design and development of professional arenas after graduation. After two years, I was stimulated but unfulfilled. Owners were no longer excited by continuous sightlines and reverberant seating bowls. Instead, they were attracted to the Internet of Things, the dreams of wristbands that connect to your credit card, and the promises of personalized welcomes as fans breezed through checkpoint. They were excited by the promises of data.

And while I was working in stadia to secure public goods out of political tools, the tools themselves had morphed. It was no longer architecture and public space, but data architecture and a new, esoteric, representational space. Still imprinted by the principles of an architect's moral responsibility, I left HOK to pursue a deeper understanding of data in practice.

Two years later, I've learned what it technically takes to deliver the personalized welcomes and payment wristbands. I am aware of the complex source integration, ID unification, and workflow automation systems that must be set up to be able to ingest billions of rows of data per *second* to track traces of people in digital space, optimized so that when the time is right, companies can show someone the things their past says they want. I understand what happens to a visitor after they click an

innocuous button allowing a system generous access to their cookie jar, without full awareness of what it means and how it affects them. I've had my hand in designing the ecosystem enabling the data engineer to build a pipeline of digital fingerprints.

In this space of choices made for others, beyond the already serious issues of privacy and security, the ones that concern me most are ontological. As our identities get reduced to a series of events, behaviors, and attributes, who we are gets preserved while who we have the chance to become gets predetermined. The diversity of our future potential diminishes. So -- what if the technological systems engineered were transparent enough to be accessed by the non-technical? What if we not only visualized data, but also algorithms? What if we could collectively participate in the design of machines learning? What if we thought beyond how to use computation to design, and considered what it means to re-design computation for greater understanding of why we see what we see, if not to be more fully aware of the decisions we make, then because today's advances in technology is starting to fundamentally shift the economic role of humans in the workplace and how they are organized. Continual sidestepping of the economic shifts brought on by technology will only guarantee disastrous socio-political consequences later.

As architects, we have a deep body of knowledge that speaks to how the way we build builds us. By extension, it is part of our moral responsibility to engage with how information environments intertwine with and influence the built. I have focused my professional career on finding a deep problem in practice that was worthy of pursuit, but what drives me to care so hard is an understanding, both historically and personally, of what representation means in relation to structures of power, systems of access, and the experience of the everyday. Melded into my parents' story is my own; they label me hearing 'impaired;' they group me 'disabled.'

Computation works in this charged space between representation and reality, in a liminal gap I've been framing and re-framing most of my life. As a graduate student in Harvard's Masters in Design Engineering, I hope to bridge this gap and re-think how we can approach the construction of socio-technological systems with intentional inclusivity, not only of race, sex, and ability, but of age, education, and class. This requires a broad approach and deep input by multiple stakeholders. With a program that is designed so that the problem I am interested in can be tackled, that acknowledges the need to be interdisciplinary because of the nature of the problem and not just because of creative output, that relies on collaboration for the design of planned systems, I am nothing but excited.