

## Introduction

Brene Brown in her Ted Talk “The Power of Vulnerability”, provides the simplest clarification of purpose for all human endeavors, “Connection is why we are here.” She goes on to elaborate that the one thing that consistently unravels connection is shame and fear. As software engineers, we focus so universally on the quantitative, we are often identified as lacking the soft skills that would address or remediate shame and fear. Yet we can quantify the impact of these disruptive entities that are common across human experience. We can pinpoint their presence in the implementations enacted to absolve ourselves of the fear that our data is insecure, fear that our data is imprecise or inaccurate, and the eventual shame that results when those fears come to fruition. We can be so proactive in our behaviors to combat fear and shame, that we silence innovation and deny ourselves success.

When an engineer says “I can’t” because “I don’t know”, that is not an engineer and those are not the facts of the matter at hand. That is, to be clear, a human being verbalizing their fear that they will not be able to determine an adequate solution. “I can’t” is a pre-emptive strike against shame. What I have learned not just from this project, but over the course of my time pursuing this Master of Science in Software Engineering at Stevens Institute of Technology, is HOW to be an engineer. It is correct to surmise that being an engineer is not the sum of the list of skills one has collected. I can code, am I an engineer? I can devise a development plan, am I an engineer? Those skills are sound and useful, but they alone do not make me an engineer.

As Brene Brown points out, fear and shame are effective in unraveling connection because we are catastrophically resistant to vulnerability. As engineer’s our greatest vulnerability is what we do not know. Simultaneously, not knowing is the domain in which we do ALL our work. This is a seemingly treacherous dichotomy that determines whether we are destined to spend our careers simply collecting skills, the sum of which never amount to distinguishing ourselves as engineers. When I don’t know, I can learn. I can solve. That is what makes me an engineer.

At a very young age, the phrase “I can’t” was eradicated from my lexicon by a teacher who said, “We don’t say I can’t”. When I don’t know the answer, I steadfastly cling to the belief that I can find it. Throughout my career, I’ve developed the wherewithal to stand against the fear of not knowing because to be an engineer is to face the unknown with the confidence that comprehension comes with steady, consistent exploration. The breadth of resources we have at hand to dig, disassemble, investigate, experiment, and prototype are severely diminished with the words, “I can’t”. Likewise, our resources as engineers are made infinite by a persistent willingness to expand our knowledge, to explore, to confidently accept the challenge to solve.

As a team, DiTTo failed not because our data was insecure, inaccurate, imprecise; but because students training as engineers said, “I can’t” and believed it. “I can’t get this prototype to build in my Development Environment”. “I can’t figure out how to stream a source using named pipes”. “I can’t code in Java”. “I can’t” is not in the lexicon of engineers. In students, “I can’t” is powerful. It’s final. “I can’t” is the one failure from which an engineer can never recover. It is the failure from which one does not learn, grow and develop into success. I learned from DiTTo that when others say “I can’t”, I can. And, in fact, I must.

jiNx isn’t just software, it’s connection. It is a solution predicated on the premise that each individual customer has a unique door to access our world, and we open it for them. The door and everything on the other side is utterly unknown. At jiNx we embrace that because the unknown is the one place engineers are themselves uniquely designed to inhabit.

## Why Build jiNx?

Better to ask, how do we reach each other? How do we connect when we are pulled ever farther apart by distance and ideology? If information is the world's only truly priceless commodity, connection is its most sought after resource. Information may be parsed by qualifiers, like truth and relevance, that will ultimately determine who listens. However, before those qualifiers can be applied, a connection must be leveraged to ensure information is disseminated to the widest possible audience. In the prevailing zeitgeist of global economics, not just businesses, but ideas flourish or flounder given only one parameter - connection.

What if a tool existed that could predict and guide users on how to amplify their connection to the world around them? A consumer seeking to expand their audience and ensure that they can effectively spread their core message is ultimately focused on optimizing connection. jiNx is a platform of interwoven machine learning technologies with one goal in mind - a superlative connection.