

JETRO & CIC: Insights Into Massachusetts' Startup Ecosystem
Issue #3
Featuring: MassRobotics

Introduction by CIC Japan Desk

It's our pleasure at the CIC Japan Desk to introduce you all to MassRobotics for this *Insight Into Massachusetts' Startup Ecosystem* article. MassRobotics is linked to CIC in many ways, no more so than Tim Rowe, our founder, being on their Board of Directors. While that is a significant factor in the two companies' relationship, it wouldn't necessarily mean much of anything if we didn't do anything with that connection. Over the years, CIC has been happy to support MassRobotics with their growth and we're always looking for ways to collaborate with them.

To give some background, MassRobotics is a nonprofit that seeks to be an innovation hub for local blossoming robotics startups, creating a connected community of the newest generation of local entrepreneurs. MassRobotics has been around in name since 2015, though the idea of cooperation, the people that helped build it, and avid academic community have been around for much longer. They help provide the space and tools that act as a barrier to entry to many new startups, help them prototype, test, and make adjustments, all while providing connections to the local ecosystem. MassRobotics has spanned past just the borders of Massachusetts however, connecting internationally with businesses, governments, academia, all to further the goal of helping startups achieve their goals.

The Japan Desk has been lucky enough to finally work with a multitude of amazing roboticists from MassRobotics' roster as we run robotics focused programs for startups from Japan. Russell Nickerson, Partnerships Engagement for MassRobotics, has been instrumental in making our connection with them a rousing success. For that reason, we conducted an interview with Russell to get some perspective of MassRobotics from an insider.



Russell Nickerson
Partnerships Engagement
MassRobotics

Could you kindly give me a self introduction and describe your role at MassRobotics?

Hi, I'm Russell Nickerson, and I've been in robotics for all my life. I previously worked for Softbank Robotics as a lead repair engineer, though now I've moved on to assisting the Boston-area robotics ecosystem in a wide variety of ways at MassRobotics. My journey with Robotics started with my interest in Japanese pop culture and eventually led me to working on Softbank's NAO and Pepper robots. More recently, I've started my own company called Collabots that currently focuses on entertainment robotics.

My childhood interest in robotics stems from a lot of animation that heavily featured robots, Transformers, Macross being some examples. When my high school guidance counselor asked what I wanted to work towards as a career, I originally thought that creating video games would be a fun idea. However, as I got older, I asked myself about what aspects of games that I truly enjoyed, and robots were a theme that stuck out to me. I understood that what I really wanted was to make robots that help people and I managed to make that come true right out of college. I ended up working for Aldebaran Robotics, which was then acquired by Softbank, to help work on their robots focused on entertainment and aiding children with autism. It was a blessing to be in a more altruistic robotics position.

As for my current role at MassRobotics, I am a partnerships manager, though what my role actually entails is different by the day. One moment I could be unclogging a 3d printer or

taking out trash, next day I could be shaking hands with the mayor, talking with a delegation, or even advising a startup with a technical challenge. Each day is something new and MassRobotics is a unique place that provides variety on many levels; the resident startups, the equipment in our facilities, our partners diverse strategic focus and a slew of events.

In your own words, could you describe to me what MassRobotics is? What role does it play in the local robotics ecosystem?

MassRobotics is a non-profit coworking space that focuses on scaling robotics startups. Our physical location has many tools to help such as industrial robots, 3D printers, CNCs, and anything else a startup needs to prototype. We also serve the community with STEM programs and hold many events throughout the year related to segments of the large robotics industry. Even though “Mass” in our name stands for Massachusetts, we try to get people to think of it like critical mass as we’re connected with a number of organizations from around the world, not just from this state. Robotics and automation really touches so much now, so it is important to connect people to those that can help provide them with the solutions they need. There are so many academic institutions, existing robotics companies and supportive organizations that it makes the most sense to have a presence here if you are serious about building a lasting robotics company. MassRobotics really acts as the connecting tissue between many players in many fields and we’re proud to be the ones to facilitate those connections.

Locally, we have our three main pillars of connecting our corporate partners with startups & scaling the startups, creating accessible STEM education in order to help grow the amount of people in the field, and advocacy to help steer the industry in a direction that remains beneficial for everyone. It’s nice to be a place that can aim to help and connect people without any ulterior motives.

How did MassRobotics come to be?

In the early days before MassRobotics, people knew that Massachusetts was a hub for Robotics companies. There were plenty of companies that were being churned out of the multitude of academic institutions in the area, but there wasn’t really a good place for them to get started and come together once they left the sphere of academia. Robotics is so broad that there was a difficulty in folks coming from outside the local sphere and looking for someone to talk with about something specific.

The MassRobotics website really tells the story perfectly. “MassTLC established the Massachusetts Robotics Cluster in 2004 to bring together companies, institutions, and individuals engaged in robotics research, education, product design, and commercialization.

During these cluster meetings, industry leaders discussed breakthrough ideas—one of which was developing an innovation hub and co-working space focused on robotics. Cluster members worked together to develop a business plan and organization that would accelerate and escalate robotics technology and adoption. In 2015, those ideas came to fruition, and MassRobotics was formed as a non-profit with a mission to support the growing robotics ecosystem.”¹

What would you consider the main strengths of MassRobotics to be?

Some people will come visit us here without really understanding who we are and what we do, but once they take a tour of the space, they get it. MassRobotics is kind of a no-brainer for roboticists. We don't take equity from the startups and we don't have any time limit of staying with us. Hardware takes time to develop. There are so many resources both tangible and intangible that are available to partners and residents. Visitors international and across the states often ask how they can replicate what we are doing. We often are a bit modest and shy to say it but really our team is a core strength that is hard to replicate. We have a small dedicated, well connected, passionate team that has a clear, realistic vision of what it takes to make robotics broadly succeed. When you work with MassRobotics, you know you are getting honest, direct access to the robotics industry top to bottom.

Can you talk about how corporate partners interact with MassRobotics?

Corporate partners have different strategic goals. Some want to explore the industry broadly, some want to introduce a new product to startups and academics for feedback. Challenges and programs are also popular to get a slice of the industry. We have a Healthcare Robotics Working Group which precipitated the [Healthcare Robotics Catalyst](#) program to help startups navigate challenges of getting into the healthcare market. We also hold academic challenges like the [Form and Function Challenge](#) to showcase global academic talent in robotics while introducing them to cutting edge products from our partners. We are quite dynamic in how we work with our partners. Being with MassRobotics sends a signal that there is interest in the field and we are open to collaborate with the ecosystem. There aren't many ways for large corporates to get direct access to over 80 startups and a strong community of academics and professionals.

¹ <https://www.massrobotics.org/about-us/>

What resources do you have in place for startups newly coming into your space in Boston? Do you have specific resources for internationally based companies?

International robotics startups love to get a spot at MassRobotics. It is a low risk, high impact opportunity. When visiting, it acts as a workspace closeby the airport, as well as a mailing address. Really, it can be a spot to hire a single intern to assist in growing presence in North America. Our resident fee is monthly, so there doesn't have to be long term commitments that don't make sense to get into at early exploratory stages of a startup. Again, access to a variety of robots and equipment is core to what we provide so that is always a big attractor. The resources and opportunities that naturally come from partners, VCs and the community is why many stay. We do our best to connect residents with help, even advising where there might be available apartments to live in the area. It's like a family.

Does MassRobotics have any Japanese Connections?

Personally, I'm quite interested in growing our connections with Japan. One of our leading partners is Mitsubishi Electric, who provides things like their industrial robot arms and support for them. We also work with Harmonic Drive and have worked with Panasonic in the past. The perspective of 'Japan is ahead of everyone with robots' is notably diminishing as many other countries bolster their offerings from the private sector. I noticed many Japanese companies at the Japan Factory Innovation Week show at Tokyo Big Sight were using robots from outside of Japan. Of course, there are many strong Japanese companies still predominantly in the field, but we are concerned because after almost 7 years of operation at MassRobotics we have not had a Japanese startup resident yet. We get startups from Australia, Canada, Singapore, UK, Israel and more but not Japan yet! I would like to change that. Japan needs to grow their GDP with more international innovation and collaboration with companies big and small. We are assisting with the CIC Japan Desk & METI via the JStar-X program in hopes to showcase a way to test the robotics market and introduce startups from Japan to a way to have a presence in the US. We would like to also show US companies how to work with Japanese companies as well!

How can people get connected with MassRobotics?

Well, on our website we have a [newsletter](#) as well as an [events calendar](#). We always have something we are planning so these are the best ways to be connected. We have a large public event in the Boston Seaport coming up called [RoboBoston](#). This showcases robots to the public and let's people interact with a variety of companies. This event will have a career fair as well. These events really help people understand what robotics is about and different ways robots touch our lives.

Afterword by CIC Japan Desk

MassRobotics is situated in an honestly special position in Massachusetts. While MIT may be the most famous, it isn't the only university in Massachusetts to have a solid robotics curriculum. With such a rich environment of young minds with access to robotics education, it would be a shame if they didn't have a proper stepping stone to reach the stage of their careers. MassRobotics offers a great opportunity for them, but it isn't limited to just recent graduates, it's open as a resource to any Robotics startup with a passion and a goal. MassRobotics remains an amazing resource to entrepreneurs looking to give Massachusetts a look.

Massachusetts' history with robotics doesn't just end at the university level, amazing companies such as Boston Dynamics, creators of Spot the robot dog, SharkNinja, the creators of your favorite blender, or even companies like IBM, call Massachusetts their home. This state truly offers a wide variety of opportunities for roboticists, whether you're brand new to the industry or have been around for decades.

It was an absolute pleasure speaking with Russell about MassRobotics, and as he's someone with a lasting connection to Japan through robotics, there was a unique perspective to be had. If you have an interest in connecting with any of the MassRobotics crew, be assured that they are warm and welcoming to all!