

*Interview with Edward Kim of HICapacity, a Hackerspace in Honolulu, Hawaii*

<https://hicapacity.org>

**Laurel Carlson: Can you say a bit about who you are, your position within HICapacity, and how you came to be involved with the hackerspace?**

**Edward Kim:** My name is Edward Kim and I'm a Senior Software Engineer at Slickage Studios, a local consulting firm in Honolulu, Hawaii. I am a graduate of the local university (University of Hawaii at Manoa) with a Bachelor of Science degree in Information and Computer Science. I have been working in the tech field for about 10 years now. I'm also the main point of contact at HICapacity. HICapacity consists mainly of professionals, being so, most of our members hold employment outside of the organization. Being that we serve a community and don't really see ourselves as a business, our members typically hold no real titles. I call myself the main point of contact mainly to share a common ground with people that are not familiar with our structure. As for the things that I do at HICapacity, I handle most of the logistics within the organization. This includes but is not limited to planning and coordinating events with both members and outside talent, handling membership fees, rules, and disputes, and general outreach with regards to our organization as a whole and as an advocate for the tech industry whether it relates to STEM education or tech awareness in regards to other industries here. I became involved with the hackerspace thanks to a old college buddy that was already aware of the organization. Through this connection, I quickly became involved with event-related duties and worked my way up through our old structure (typical business hierarchy - president, VP, treasurer) as leadership continually moved to the mainland for better opportunities.

**Laurel: How do you define the goals of HICapacity?**

**Edward:** HICapacity's goals are really hard to define. We constantly grow and evolve as the community evolves and we try to meet the needs of the community as that happens. We were originally a makerspace with the intention of focusing on both traditional hardware topics like arduinos and other microcontrollers but also shared a focus on a lot of software related topics like JavaScript and Ruby on Rails. Having grown in many directions at once (carpentry, t-shirt making, robotics, and more recently fashion tech and wearables), we tend to rebuild our organization and our goals as the needed. As of right now, we more broadly define ourselves as an advocate for technology within the state of Hawaii. This is a very broad goal and was intentionally picked to be so. We want to focus on both the sharing and increasing the knowledge between professionals within our community and general advocacy of technology as a viable industry in Hawaii, whether it be through STEM education outreach or setting up events that highlight the technology sector here.

**Laurel: What does an average day look like at the hackerspace?**

**Edward:** An average day at HICapacity is pretty varied. Depending on the day, we may have one of our weekly scheduled "topic" nights like "Programming Night" or "Hardware Night" where members with a topic-based focus can come down to our space and converse about said topic or we may have one of our monthly events like "NodeSchool" or "Cascade HNL" where an

even more niche topic will be covered in some form or another (typically a presentation on some specific software related to the aforementioned topic). On certain nights, we do have one-off events where a member may give a presentation on a topic that they've been working with, or one of our more community based events like "Ladies in Tech." Due to the fact that most of our members are gainfully employed, the daytime at HICapacity is often quiet but we do have student members coming in to utilize the space as a place of study or as a time to get mentorship from any professional members that may be around. We do have one or two retired members that keep a daytime residence in the space to work on hobby projects.

**Laurel: I'm interested in efforts to involve women, people of color, and other under-represented groups in technology/programming. Is this a concern for HICapacity? Are there any efforts to increase involvement of these groups?**

**Edward:** It is a concern for HICapacity in the sense that we're continually working to advance those fields as well but we often lack proper representation in those groups. It is only recently that a female member created an event primarily to tackle the topic of female representation in technology. Given that we're in Hawaii and it being a melting pot of cultures, we do not worry too much about the issue of people of color in technology since our member base is mainly comprised of people of color as is the industry itself down here. As for other under-represented groups, we are looking into those but lack an individual from that group to lead that effort (LGBT, disabled workers, veterans, etc.). We would rather have someone with that domain knowledge lead those events instead of us guessing what they would want. We openly welcome all people and have strict house rules and a formal code of conduct that encourages welcoming all people. These rules extend to our online properties as well. We also ask anybody to contact the board directly for any reason that makes them feel uncomfortable with the assurance that it'll be quickly and fairly dealt with.

**Laurel: I'd like to hear about how hierarchies are structured at HICapacity. Is there any system for deciding which projects are and are not pursued?**

**Edward:** At HICapacity, we have a completely flat hierarchy. We have no titles. The only distinctions we hold are members joining our board if they want to have a more active role within our organization. We make it very clear that holding a board position does not mean they hold any more "power" over any other member. We highly encourage all members to view each other as equals. Although one member may have certain responsibilities over other members, it is purely in a logistical sense. For example, we originally shared one email account for board-related issues and one email for public-facing questions but quickly found that emails often went unanswered because members would assume another member would handle it. Thus the need for designating one member with the "job" of solely handling those email accounts was created. All other responsibilities within HICapacity are handled in the same manner (finances, event planning, etc.). A person is designated to handle those responsibilities but often asks for the input of the all other members before making critical decisions. The board itself was necessary for the organization to reach quick consensus on any critical or time-sensitive issues like harassment reports. Any decisions made by the board are made public to all members and all members are encouraged to give feedback or "veto" any decisions the board has made, given a consensus is reached by those members outside the board.

Given this structure, projects are handled in much the same way. We hold monthly "General Meetings" where all members can give their feedback on which projects should be pursued at any given time. If a consensus is reached at the meeting, then the project is pursued. If no consensus is reached, the project is kicked down the road but may be revisited at a later time. If a consensus is reached to not pursue a project, it is presented to the whole organization before it is killed.

Projects are often member-driven. A member may present a project with the assumption that they will spearhead it and the community will support it if they can. This leads to a structure where many members can and often do work on many different projects at once with other members occasionally checking in to check the status of it. Although this gives great freedom and ease of starting a project, many often end up by the wayside if the original member loses interest. We are currently looking into this though.

**Laurel: Can you tell me about a particularly interesting project you've seen at HICapacity?**

**Edward:** The more recent projects are the most interesting in my opinion. We've grown so much in the past few years that the variety of topics have grown as well, but the one that always sticks out in my head is the "Ladies in Tech" event. It was started by our recent summer intern, Jessie. She started off at HICapacity as just an intern from the local university but quickly got involved with many other aspects of our organization. She noticed the lack of female representation not only in our organization but within the industry as a whole. She set out, on her own, to create a night where women can come to the space and feel welcomed. It was a successful event with both students and professors from the local university as well as professionals all gathering to talk about the topic. It was also a record night in terms of female representation at one of our events. We hope that she continues with this event in hopes that it starts a grassroots effort to change not only our little organization but hopefully the industry as a whole.

**Laurel: Has there always been a physical space for HICapacity? Are all projects done within the physical hackerspace or has a "virtual space" been conceptualized at all?**

**Edward:** There wasn't always a physical space for HICapacity. Or maybe there was. The history is probably key here. HICapacity was started by a few professionals looking to just "meet up." They originally met at local coffee shops and often met at different locations for each "meet up." With each "meet up," more and more professionals gathered and the consensus was reached that they could probably collect membership dues and maybe even pay rent at some dinky office somewhere. This was the inkling of HICapacity but the real formation happened during a local "Ignite" event where someone formalized the idea of creating a "makerspace" in Hawaii. And so a membership was formed and dues collected until a physical office could be rented at a local co-working space.

With regards to the projects, they aren't always done at the space but the space does lend itself to collaborative efforts. With the recent addition of an online chat service, Slack, we've moved a lot of discussion online and typically use the space to host events or any of our other regular topic

nights. It's also become a sort of mini co-working space where members can go to get stuff done if they are working on freelancing jobs not related to HICapacity. Being that the majority of members are in the software industry, we've embraced many online resources like Google Docs, Github, and DokuWiki. We've even built our own public-facing website and membership portal thanks to member contributions while utilizing Github to store our code for these online properties in an open source manner so that others can use our code if they want to.

**Laurel: What does HICapacity's infrastructure look like? Does the current infrastructure fulfill the needs of the hackerspace?**

**Edward:** I guess I should start out with the space itself. Membership fees go to paying rent on an office located at the "Manoa Innovation Center" where rent is discounted for the first few years. We were originally in a co-working space as the anchor tenant but moved when the opportunity presented itself. The office itself is a cozy 400-ish square foot space with windows that face out the exterior of the building toward the street. This is great because it lets in a lot of sunlight and has windows that open to let out air. This is important because we do have movable soldering stations and although we do have a single fume extractor, an open window is also handy to have around if there is need for more than one soldering station.

Moving on, we have lockers, two small desks for personal use, and one larger desk for hardware-specific work. There is also one conference-style desk that most people sit around during our events to not only work but converse with others as well. We feel that this setup allows people to freely work off to the side if they have a deadline, or join the group at the conference table for whatever discussion is happening. We also have a couch and gaming center on the opposite corner but that hasn't seen much use for its intended purpose. People do nap on the couch for time to time.

As for the items in the space – about a dozen office chairs of various brands, a few computers (2 laptops and 1 desktop), a few monitors, a number of arduinos, raspberry pis, robots of all shapes and sizes and brands, a bike rack (fits 2), a bookshelf with many engineering-related books, and a lot of assorted cables. There's also a single projector if anyone wants to throw something up for everything to look at or for movie nights. Lastly, there are many random microcontrollers and microchips, and one (working) 3D printer. The majority of these were donated or found on street corners. The need for computers themselves is quite limited since almost everyone brings their own laptops (mostly Macs).

The current infrastructure is adequate for most nights but on nights where there's a large event happening, the biggest trouble is locating more chairs. There have been times where we've had to ask neighboring offices to donate chairs for larger events or unexpected crowds. So in short, not all the time. But given that membership funds just barely cover rent, and there's no critical need, we get by and hope for more donations.