

Asian American and Asian Resource and Cultural Center

Interview with Tina Chen

(Purdue Alumni, Technical Program Manager at Facebook AR/VR) Interviewees: Gwyn Condino (Undergraduate Staff, Purdue AAARCC) and Dr. Pamela Sari (Director, Purdue AAARCC)

Edited for Clarity

| TC: Tina Chen | |
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| PS: Pam Sari | |

GC: Gwynelle Condino

PS:

Hello, everyone! This is Pam Sari! I direct the Asian American and Asian Resource and Cultural Center at Purdue University. Today is Thursday, April 30th. The year is 2020. I'm here with Gwynelle Condino. Gwyn is our Undergraduate Student staff at the AAARCC. She is a rising senior in electrical engineering and we are accompanied by our guest today, Tina Chen. Tina is one of our alum and she is currently working as a Technical Program Manager at Facebook AR/VR. Welcome, Tina!

| TC: |
|---|
| Thank you! |
| PS: |
| Thank you so much for doing this with us. |
| TC: |
| Sure! |
| PS: |
| So, wanna start, Gwyn? |
| GC: |

Yeah! Just so that we can get a little bit of your story, where is home for you? And maybe you could give us a couple of your favorite childhood memories and also your K-12 education background.

TC:

Sure! So this is always a complicated question cause I think there's probably many in the Purdue Asian American Community. It's pretty multicultural. I was born in Taiwan, lived there until I was nine, and then pretty much did all my schooling, or I guess most of my schooling, after that in South Africa. I grew up in Johannesburg. I had gone to first year in a university there in South Africa before I came to Purdue. So, that's kind of my upbringing. And I think you had another question that I forgot.

PS:

I think that's good!

GC:

Yeah, that's good.

PS:

And you were at Purdue from 2000 to 2004, is that correct? Can you tell us more about your time at Purdue, what major you took at the time, and if there were organizations that you were part of? Also, we're curious about some of your favorite memories about Purdue and West Lafayette.

TC:

Yeah, so... Well, I came to Purdue in kind of a... Not a conformed matter. I actually was going to college in South Africa. My family had been robbed at gunpoint in our home when I was in high school, so my parents were pretty keen for me to pursue my education elsewhere outside of South Africa. So I started looking at different opportunities, had people help me... A bunch of stuff that went up and kind of didn't pan out. Long story there. But what netted out was I was actually doing pre-med, or medicine, in South Africa and then I went online. Because of all these things that didn't pan out, I just one day went online and started looking. Back in 1999, Garner Line was still dial-up age and there wasn't a lot of resources online, but I did find Purdue online and I think it was probably April or May, so it's past most US college admission dates or admission application dates, but Purdue had a rolling application and the only thing they needed from me, even though I came from an English speaking country, was TOEFL scores and nothing else. So I quickly also went online and found a local center, did the test quickly and submitted, and then got accepted very quickly. And that's kind of how I came to Purdue. The first year at Purdue was kind of confusing for me because the schooling system between South Africa and the US is so different. And the way you commit yourself to a major and just the way the

coursework is laid out as is just all drastically different, so the first year was a little difficult. I've always been sort of a self-taught programmer in high school, so I took the computer science major with sort of a minor in pre-med or just elective courses in pre-med. But the first year, I didn't really enjoy it because the computer science program was not a very collaborative one. It's not good or bad it's just that that's who I am. I prefer a collaborative environment when we can work together as a team and we can think together and build things together. That's what drives me, and I didn't find that so much in the computer science department. And the pre-med courses were fine, but I also heard from counselors that it's really difficult as an international student to actually get admitted to the field. Also, I don't have a very good memory. Good analytical skills, but bad memory skills, so that was another thing that played into it. And then I came to discover engineering and I took the Intro to Engineering class. And then I thought that engineering was quite a cool field, so I started taking the first-year engineering classes. Then I met a professor... I forgot his name. He's in the ME department and I just really clicked with him. He has lots of life philosophies, and I really enjoyed the mechanical courses, so statics and dynamics, I really enjoyed that. I ended up TAing, or not TAing, but grading that class just because I enjoyed it so much. So that's kind of my transition into engineering and I didn't know if I wanted to commit to a certain specialty in engineering and I thought if I was so passionate on one I would pick it up after my undergrad. So folks just suggested that if I was so unsure, I could pursue industrial cause that gives you like a flavor into each. I always thought that I was going to pursue a master's degree after that so I kind of went down that route. Some of my cool memories of Purdue was going to school in winters, a 7:30 AM class, through the tunnels, and braving the dark and the wind was a pretty interesting experience given that I grew up in South Africa. South Africa is very much like, or Johannesburg is very much like, California. So mild temperatures, sunshine all year long, so that was a pretty interesting experience. My first year, I also did some part-time work. I lived in Earhart and then I took up a job as a... I forgot what it's called... A resident, I don't know, computer nerd person. So basically there's a sign up sheet and all the girls in the dorm sign up where they need computer help, and when I have time, I would go and check off the list and go visit people in my bunny slippers and my PJs and help them out with computer problems arranged anywhere from an actual networking problem to things not actually connected properly. And that was a really neat experience for me because I enjoy helping people, but mostly because I got to meet so many people and just learn about the diverse background of people coming into Purdue and that was just super fascinating to me. Just the communities that exist within this big campus and how multicultural it was, so that was super neat. I didn't join any clubs or anything like any organized organization, per se. Not sure why. Maybe that's just a personality thing. I did start, like as I grew up and an atheist family, but at Purdue I somehow came into, like ran into friends who had a faith and started digging into that and myself found faith there at Purdue, so that was quite meaningful for me.

GC:

That's great! So I was just wondering what you did after you graduated and how you think Purdue prepared you for the job market.

TC:

Yeah that's an interesting question - it was also not very well organized. So coming to graduation in 2003 and I hadn't interned anywhere and also think that was a time where it was hard to get a sponsorship for an H1 and that was also a time where OPT rules were changing, so in the summer of 2003 through an organization, I got placed in a summer program like an internship here in California for a Semiconductor Company and kind of I was living in Stanford for the summer and basically doing an internship for this startup that was working in semiconductor and the thing that they worked on was this GPS chip sets that we're now so used to GPS but back in 2003 there wasn't even a TomTom and the company was just a startup then. I helped them with very basic things like write scripts, so very very basic things, I would say. So that's kind of like I build a database and things like that. That's the last year of college and after I graduated, a lot of my friends because of this uncertainty in the H1 sponsorship a lot of folks just jumped into graduate degree, but I was pretty motivated to get off my parents' paycheck so I got in touch with the folks that I interned with and they had while I went back to school and they had just IPO so they had some money and they could hire me back so they so they offered me a job and I moved back to California to work for them. So that's how I haphazardly got into the role that I was in back then through this opportunity.

PS:

That is such an amazing journey and how did working for that company, how did that lead you to your more recent work with big name companies - right now Facebook but I also think you worked at Google and Amazon before - so can you tell us about that process ?

TC:

Yes, so I worked in that company for 7 years and one of the reasons why I stay there for so long was actually there's a few, but if I be honest one of the reasons is because I didn't have a green card so I couldn't move around and so I was kind of stuck there. If I had to be honest, it was one of the key reasons and a few of other reasons is the community that a startup brought me now I'm still friends with all those people that I worked with almost 20 years ago. Every Christmas I see them, I see their kids, I know their kids - it's the community that kind of finds you, I learned a lot of things sort of ad hoc through working there a lot of skill sets I gained while I was working there, so the community was one of the reasons. And then the last reason is because the company is so small that when you go in, you're kind of expected to pick up lots of threads and run with it and during my stay there, I had changed from positions from software developer to so that's when I interned them and went back to build tool suites for development of their silicone or

software and I transitioned in that seven years after the first two and a half to 3 years I transition into program management role and because of that transition it also opened up new skill sets that needs to be developed and it was an interesting because I was participating in this company from a different angle and so that's also another reason why kept me around for a couple more years. So the transition from a software engineer to a program manager and the reason why that happened was that nobody really goes to school for program management and it's kind of like this nebulous thing which in the industry is quite important so you don't really go to school for that. So no one actually really comes out of a degree with and hire program managers and staff them on programs and things like that and in 2007 I think, 2006 or 2007, this company that I was with, SiRF Technology, gotten really really successful because that was back in the days where now we're starting to have not so much smartphones as we know of it today but feature phones so kind of less dumb than a regular mobile phone I guess and GPS was becoming more prevalent. Everyone had a dash thing from Garmin or TomTom and then FCC was starting to mandate into these like less dumb smarter phones and with that taking off, we were just selling a bunch of chipsets and then competition came and large companies like Broadcom sued us and we lost a lawsuit to Broadcom which got into an IP dispute and we lost the lawsuit which meant we needed to go back and change one line of code and every single binary that was ever deployed from the company. We had no way of tracking what we deploy, it was so ad hoc I just saved my code, I made the change, and I made random changes and then I just deployed to customers. There was no way for us to go trace back. I mean there wasn't any way for us to go trace back, what we needed to do was to change the code and basically update everybody. But we also didn't have a scalable mechanism to do that. And through this experience we also like understood that like if teams are operating all in silos, what you end up happening is when you deliver something, whatever you deliver it is incoherent. The first time you test it, it's broken. And in the silicone world, that costs you a lot of money. So all these efforts start popping up and then I have a natural tendency of asking the "why" questions and I have a natural tendency of wanting to bring people together and optimize. So I just kind of went into that role naturally, and then later they started realizing that having this function is super important. So they put a function together and I changed jobs into that, and that's when I really discovered that this crossroad between leadership and technical understanding but then ability to lead the team and communicate where things are, this kind of crossroads role, I guess you'd call it, also combination of both hard and soft skills, was something that really spoke to me. From there I just basically like stuck with the role and have been a program manager ever since and through different companies in different kind of contexts, whether it's like silicone or software or building consumer hardware devices, which is the field I'm in now, I've just taken the role and continued with it and I really enjoy it. And now at Facebook I run a team of about 30 folks, mostly program managers, kind of building the technology that powers, well building the software and algorithmic technology that powers AR/VR headsets. So that's kind of the role of my team, and I still really enjoy it.

PS:

I really like the explanation because one of the things that we do at the center and in different contexts is also trying to bring people together like when we try to build the center we talked about we really want to weave Asian and Asian-American experiences in to Purdue campus, but we also want to bring groups of people together. So I'm curious also, I really like that explanation. So in your context, even though you are now in large well-known companies, do you feel that it's still possible to have that sense of community compared to the first company that you work with for 7 years. Is that sense of, obviously is it's togetherness, needs to achieve something. Do you think it's still possible and do you also get to know the people in really close way as fast as you did in your first companies, is that still the case, or how is it different now in terms of building a community?

TC:

That's a good question. I think in big companies, what you do lack is that sense of camaraderie. In small companies, basically you live or die by meeting a certain deadline because whatever you do, you pick up this thing, pick up that thing, and if you don't do those two things, the impacts are immediate. So if you don't ship something on time, your revenue drops. It's like you can feel it - that's just the life of a small company, everything, every impact is felt immediately. Whereas big companies, like Amazon, Google, Facebook, it's less immediate. Especially the groups I've worked in are mostly special project groups, and these are the groups that are big bet, high risk, basically munch off money other people bring into the company. So the impact of what we do or don't do in a big company is less immediate. And because of that, you don't get that sense of "we've got to work together" and "we've got to charge up this hill because we'll live or die by it." There's just not a sense of that, so that's just in general the contrast between a big and a small company. I will say though that in big companies, it's like going to school in Purdue, is that it's not really about the company. Like the company becomes more of an ambient thing. So yeah, we all work at facebook, but it's more ambient. The thing that's more important is the microcosm that is around you. You have an impact in that microcosm and so you can create a community if you like, and so through companies that I've worked at, or at least in Silicon valley, this is true is like lots of times people will tell you, you don't get a job in Silicon Valley by applying to some website. It's the relationships and the community that carries you through company walls. And I repeatedly tell people that. That's kind of what's so special about human beings - is these relationships. And so.. I think at least I try to make a conscious decision to build that community wherever I am at, you know, I've had relationships from different companies and some of them, like, that I've worked with like ten years ago, we're working together again today. That's pretty joyful for me. I also take a bunch of interviews a week and people ask me what makes you stay at Facebook?" Some people look at Google and they're like "I'd stop at Google, why would you

leave and go to Facebook?" One of the reasons that's keeping me at Facebook is because of the people around me - like it's really good people.

GC:

So what was your favorite project that you worked on and why?

TC:

In my career?

GC:

Yes.

TC:

Probably the Amazon Echo project. Well, that and the Fire TV project. So on the Echo Project, I was the first program manager on the project when the team was just 5 people. So I had a special opportunity to basically create prototypes, bring it to Jeff Bezos, and have him tell us what he liked and what he didn't like and kind of iterate through the process. And the thing I really liked about the project was that it had a clear purpose from Jeff. He just wants more people signing up to Amazon services. So it's very nice, it's a clear purpose. And he left the breath of how to do that up to us. So that was kind of fun, and also I've never done a hardware program management role before, so I've never had to go to China, run builds, and all that stuff is new to me as a program manager. Even the program management skill sets that you deploy are similar, but I've never had to do that. So that was fun for me. And then also some of my best friends I still have today are from that period.

Then I moved to the Fire TV project, and there I worked as a software launch program manager. So I'd taken the team to basically solve some of the most critical user experience problems on the platform by adding accelerators or fixing bugs and the software in the bluetooth stack and things like that. So basically solve critical I guess blocking issues and then also launching it. There was one, it was probably the first Amazon launch in New York City that was not a kindle or a tablet, so the first time they had done a new category of devices, and so they had a big launch event in New York City and just prepping for it, it was super fun.

PS.

Thank you for that story. And now, with COVID-19, obviously so, so many people are struggling and I am wondering how this situation affects your work and the company and the people around you, if you can tell us. And also what kind of changes you can foresee or view, especially for our students who are interested in career development, what would you/how would you say to them or what kind of encouragement or advice would you give us?

TC:

Yeah, so this is a very interesting era. I think this is week 7 of me working from home. I think I am pretty fortunate to work for a company like Facebook, like hiring has not stopped, and Facebook is pretty generous in terms of keeping workers who are not able to perform their work remotely. But still you know, making sure that they get paid. So in general, I think in Silicon Valley, we are pretty fortunate to be able to have this set up. Going one step beyond that, I think working from home has kind of taken a toll on a lot of people. And some of them may be more evident to you, to the naked eye, than others. Like some, you know, have single parents with 4 kids and kids are all at home and needing home school. So trying to like interweave between work and children and just house chores is just nuts. So I've seen in this time people developing empathy which I think is going to actually benefit us in the long run, because a lot of times, because we're working from home, we see that. We're more empathetic. Or at least I see more leaders reminding people to be more empathetic. Whereas I think this actually exists even when we're physically going to work, not that it doesn't exist, it's now that we can see it and it's probably more prominent because you know, everyone being at home adds to that ... stress. So I do actually like the fact that we have more empathy. I do see people getting really stressed out even if they didn't have children or whatever to tend to, like the mental stress of being trapped at home and not having that social? takes a toll from people. So I think that's also something we need to keep in mind of - In terms of advice, oh, in terms of how I foresee this change our world from a working standpoint is, I don't know, in my 10 years, or like I guess not my 10 years, I've been here for a while. For the last decade, I've seen companies, well actually for the last two decades, I've seen companies try to offshore their work and then bring that back because they were realizing that it's hard to manage offshore. So bring that back and I've seen companies allowing for remote working because of this new wave of just remote working to closing their doors to that because it's harder to control. I think this is going to teach us to invest better in tools that actually worked for us and then allowing for that remote working to blend into physically working. So I think that'll help with the traffic situation for sure. And also allow the big companies to be more open to this flexibility of remote working. So I think that's an actually a net positive and I think the net positive part, and this ties into I guess advice for your students, is that a lot of times you see opportunities for people who are geographically bound to a place of abundance. So if I go to school in the University of Santa Clara or San Jose State, I am by proximity so close, it makes me a candidate more so than anyone from five state lines next to me. I think that's probably will start to change because this sense of physically proximity has just kind of gone away and what you are left with is just time zones. And if people can adjust according to time zones, the opportunities for coworking will change because of that. So given that, I'd encourage your students to not, because what I see in companies is to go above and beyond outside of the proximities of like their state that they're in requires a lot of work. And usually people only invest in that amount of work if they get a lot in return. Meaning special hires for like you know, a certain specialty in a PhD program or whatever, people will go out of

their way to build an office or like hire people from, you know, interesting locations from around the world. Because it's purposefully hired. For general like EE or general SWE, software engineers, it's more of an opportunity cost, so I'd actually encourage the students to reach out and build more connections with people and like kind of also encourage the organizations to find ways to break down those kind of fictitious barrier and build more connections with basically close the opportunity connection and not have a more so limited to geography. I think that will be tremendously helpful for students.

PS:

Thank you! Tina, thank you so much for joining us and telling us about your story. I really love that you have been able to just get a sense of community in whatever that you do and trying to break down boundaries. I think that is very meaningful to me personally and that is something that I think I would really love to apply in my current role and also my personal life as well. So thank you so much for taking the time to talk with us and thank you also Gwyn for joining us today. Stay safe, stay healthy, thank you!

TC:

Cheers!