

LATINAMERICAN TESTIMONIALS



FRANCISCO RODRÍGUEZ

Technical Director - TII



How was your journey from LATAM -where there are almost no cryptography schools- to the international cryptography community?

I was fortunate to attend a university in the fourth largest city in Mexico, which provided a solid foundation in physics and mathematical sciences. Although cryptography wasn't part of the curriculum, the strong mathematical background I gained there proved invaluable. Subsequently, I pursued a master's degree in the same city, focusing on electromagnetic and semiconductor physics. Years later, when I arrived in the US to pursue my PhD, I brought with me a solid mathematical background that greatly benefited my studies at Oregon State University. I majored in Electrical and Computer Science and also obtained a minor in Mathematics. Additionally, I had the opportunity to join a well-known applied cryptographic group that was transitioning to the study of elliptic curve cryptography, a field that has captivated my interest ever since.

Which challenges from your perspective as part of the Latin-American community have you faced (taking into account the intersectionality of communities)?

For over 20 years, I served as an academician and researcher at a prestigious research center in Mexico City. One of the significant challenges I faced was competing on an international level with well-established research groups in Europe, North America, and Asia. I strongly advocate for collaboration projects that foster interaction between research groups, allowing them to complement each other's strengths.

Throughout my career, one of the main challenges I faced was securing adequate funding to support travel abroad and academic stays for my graduate students and myself at renowned universities with strong cryptographic groups.

What actions do you think that the international community of cryptography should make in order to make the whole community more inclusive to underrepresented groups (including the Latin American community)?

In my opinion, organizing cryptographic schools in the Latin American region is the most effective means of facilitating direct contact between international experts and young, highly talented but inexperienced Latin American students.

Which positive experiences have made you cope with the challenges of being underrepresented in the community?

There are always exceptional mentors who are sympathetic to the Latin American region and can offer valuable career guidance, as well as host academic stays at their universities.

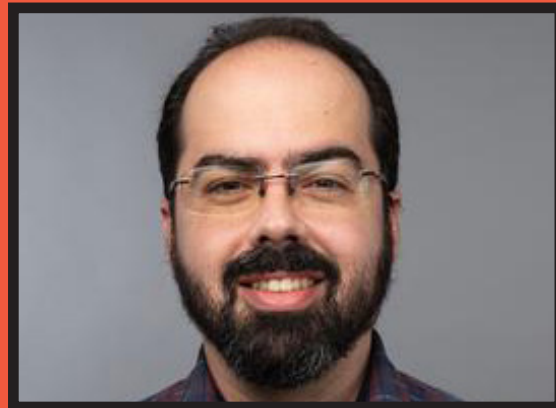
As a Latin American researcher working in the region, my most cherished experience has been guiding young, talented students towards successful careers as cryptographers on an international scale.

For instance, at Latincrypt 2017 in Havana, Cuba, and Crypto-Co 2019 in Medellín, Colombia, I had the privilege of meeting and engaging with exceptionally talented undergraduate and graduate students. It was evident that they possessed immense potential, needing only the opportunity for greater international exposure to excel in their research endeavors and dreams.

DIEGO

ARANHA

Associate Professor in the Department of Computer Science at Aarhus University



How was your journey from LATAM -where there are almost no cryptography schools- to the international cryptography community?

I was very lucky to have been accepted for Computer Science at the University of Brasilia, which had a somewhat old-school program, quite strong in mathematics. We had undergrad classes in Data Security, Number Theory, Algebra and Cryptography, with the latter based on Douglas Stinson's classic book! This was very unusual in the early 2000's, and still quite special today in Brazil. My luck continued with being admitted to the MSc. and then PhD programs at the University of Campinas under supervision of Julio López, whom I already knew as a collaborator of Alfred Menezes. The journey culminated with a 1-year stay working in Waterloo, when it was a high-profile center for research in curve-based cryptography. This was exactly during part of the "provable security wars", some busy times up there. My journey was only possible because of the opportunities I received, for which I am very grateful.

Which challenges from your perspective as part of the Latin-American community have you faced (taking into account the intersectionality of communities)?

Working as a researcher in Latin America always has a bubble feel to it. I experienced it both as a PhD student moving from Waterloo back to Campinas, but also as a faculty member trying to bootstrap research groups during my first years as an Assistant Professor. In Latin America we feel somewhat disconnected from the large centers, since we do not receive many visitors for collaboration and invited talks. The Internet has naturally reduced some of it, but the distance is still tangible. Another aspect is the difficulty to attend scientific meetings abroad. Even though I was reasonably well-funded during my PhD, I had to be quite selective in which conferences to submit papers due to travel restrictions, such as visas and sheer cost. Asiacrypt was simply a no-go by definition, for example. You could only attend CRYPTO with a paper accepted as well, to not risk having a visa application rejected.

What actions in do you think that the international community of cryptography should make in order to make the whole community more inclusive to underrepresented groups (including the Latin American community)?

Working with Alfred taught me a lot about how you can make others feel welcome even while being underrepresented in the community. Canada was also very welcoming to foreigners back then. When I moved there I could not speak fluent English outside the context of presenting a paper, and had some trouble expressing mathematical ideas precisely due to a lack of vocabulary, but I remember this was never a real problem. I'm now part of a reasonably large high-profile research group in Denmark, and I do my best to pass these experiences forward and keep my connections to Latin America alive and strong.

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PATRICK LONGA

Principal cryptography researcher at Microsoft Research



How was your journey from Latam -where there are almost no cryptography schools- to the international cryptography community?

Similarly to many other people from our countries, I had to make sacrifices and look for the means to be able to live and study abroad. It was a long journey that required extra effort and dedication because I didn't know anybody the first time I traveled.

Which challenges from your perspective as part of the Latin-American community have you faced (taking into account the intersectionality of communities)?

One first obstacle I found was that the studies I made back in my country weren't recognized abroad (either by universities or professors). So I had to first somehow "revalidate" my studies (e.g., I had to take extra courses to demonstrate my proficiency).

What actions do you think that the international community of cryptography should make in order to make the whole community more inclusive to underrepresented groups (including the Latin American community)?

Strengthen connections with universities from countries under development to allow students from these countries create richer professional networks.
Help in the promotion of conferences like Latincrypt and Africacrypt.

Which positive experiences have made you cope with the challenges of being underrepresented in the community?

The cryptography community, in general, includes wonderful, talented people who are open to challenging and fascinating collaborations with other people regardless of their origin. This has made my journey in this research area a superb experience.

FABIO CAMPOS

Postdoc and substitute professor at the University of Wiesbaden, Germany



How was your journey from Latam -where there are almost no cryptography schools- to the international cryptography community?

It was a long and quite unpredictable journey. The intention to work in this area only started to take shape during my Master's degree, where I finally discovered my passion for number theory. The maths background that I got from public schools in Rio was often insufficient. Such that, apart from other problems such as financial ones, visas, etc., I had to invest significantly more time in my studies than local students.

Which challenges from your perspective as part of the Latin-American community have you faced (taking into account the intersectionality of communities)?

As I had already completed a degree in Germany, before joining the crypto community, I was often not "labelled" as South American. And because of my path, I have a hybrid view of things. In my perception, the biggest hurdle is a lack of understanding for the problems of other/under-represented groups.

What actions do you think that the international community of cryptography should make in order to make the whole community more inclusive to underrepresented groups (including the Latin American community)?

I think that many of the offers and possible support do not reach those who really need it. For example, some of the funding for schools in Europe often only ensures that people from Europe are funded. Further, any kind of visa problems in relation to certain are often not known in the community and are therefore, in my opinion, not addressed when planning conferences. To summarise: Communication with underrepresented groups must be significantly improved and their interests should be represented in all kind of planning.

Which positive experiences have made you cope with the challenges of being underrepresented in the community?

In my experience, as soon as specific problems are addressed in the community, people are frequently willing to help. So often the cause of the problems and lack of support is a certain "ignorance" towards the problems of underrepresented groups.

DANIEL ESCUDERO

Research Scientist at JP Morgan AlgoCRYPT Center of Excellence



How was your journey from Latam -where there are almost no cryptography schools- to the international cryptography community?

Towards the end of my undergrad, my advisor in Colombia hosted a school where they invited some internationally renowned researchers. I managed to attend (it was already hard, being in a different city), give a talk and have a discussion with one of these researchers, who suggested several places for PhDs. This person opened my mind and introduced me to things I didn't even know existed! Plus, they wrote a recommendation letter for me.

Which challenges from your perspective as part of the Latin-American community have you faced (taking into account the intersectionality of communities)?

I can mention two. First, not being able to find people who I can relate to in terms of experience, background, struggles, etc. As simple as this: I was made fun of once at work because I was impressed by the existence of seasons, which don't exist in Colombia. Second, a constant feeling of inferiority, and pressure that I needed to give 10x min order to "catch up" with everyone around me.

What actions do you think that the international community of cryptography should make in order to make the whole community more inclusive to underrepresented groups (including the Latin American community)?

Incentivize mobility across different regions. For instance: attend events in Latin-America, submit to non-Global-North dominant conferences, be more inclusive in hiring processes, participate as PC in these conferences, and more. It is also important to work harder in stopping systemic microaggressions; for instance, I've received jokes of the type: "why submitting to Latincrypt? You might as well ditch the paper". Comments and actions along these lines should be addressed collectively.

Which positive experiences have made you cope with the challenges of being underrepresented in the community?

With only a few exceptions, most discouraging and "microaggressive" comments I've received are highly unconscious and non-intentional, and many colleagues are happy to learn about other perspectives and do something to change the current state-of-affairs (with the level of involvement changing from person to person). It has been very fulfilling to get into discussions with colleagues who acknowledge privileges and differences in backgrounds, and genuinely want to expand their view of the world.

SOFIA

CELI

Cryptography researcher at Brave



How was your journey from Latam -where there are almost no cryptography schools- to the international cryptography community?

My journey is quite different as I didn't study computer science nor mathematics, but rather music. Ever since highschool, my education has also been possible only with scholarships and part-time jobs, as my family didn't have the means to pay for it. Traveling to another country to study was hence out-of-question. But knowledge is generally free so I study both cryptography and programming on my own. Because I got involved with developing the OTR-protocol (which majority of contributions were made by non-white non-male people), I got invited to give talks at universities, and, like that, I started to get to know the international community.

Which challenges from your perspective as part of the Latin-American community have you faced (taking into account the intersectionality of communities)?

Both as a woman and as a Latinamerican, it has been challenging. Both because in safe-spaces for women, there can still be discrimination; and in safe-spaces for Latin-americans, there can be sexism. Perhaps one of the worst experiences I have had is being called "spicy" or being compared to the Latin-american woman stereotype, and, on a work-place, being subject to some lewd comments from my manager comparing me to a famous Colombian actress.

What actions do you think that the international community of cryptography should make in order to make the whole community more inclusive to underrepresented groups (including the Latin American community)?

Supporting the events that come from those communities, such as LatinCrypt and supporting having leaders from different communities that are underrepresented. Change only comes when the top has also changed. But more than anything acknowledging that there is systemic discrimination in the world and we, as a community, are not beyond it.

Which positive experiences have made you cope with the challenges of being underrepresented in the community?

More than anything: talking with people from the same background as myself. It is very refreshing to be able to express instances of discrimination to a person that will understand them as they too have had them (and also to be able to talk in your own mother tongue with them!).

ABDELRAHAMAN

ALY

Senior Cryptographer at TII



How was your journey from Latam -where there are almost no cryptography schools- to the international cryptography community?

Well, it was not a straight line, I can tell you that. I was looking for a Ph. D positions on Computer Science in Europe. I had no knowledge of cryptography, and I basically landed on a position on a Mathematical Engineering Department. Its focus was on Econometrics and Operational Research. They needed someone with a strong background in software development, for a project with cryptographic connotations. I took it without even knowing the definition of cryptography. I did it, because when you come from a place like Latin America, and when an opportunity knocks at your door, you do not say no. You grab onto it with all you got, because you know fairly well, you might not have another opportunity again.

Which challenges from your perspective as part of the Latin-American community have you faced (taking into account the intersectionality of communities)?

At times I found myself being the only Latin American in the teams or projects I participated in. This was the case in the public and private sector, as well in Academia. It was clear to me how impactful making a mistake was. In these environments, stereotypes find themselves the prevailing force to describe you, and your mistakes feed onto your peer's confirmation bias, and hence at times they get greatly amplified, your mistakes and their biases.

I had encounters, through the years, where peers used the "genetic shortcomings" of people of backgrounds such as mine, to justify the lack of representation of certain ethnicities in our fields of research.

What actions do you think that the international community of cryptography should make in order to make the whole community more inclusive to underrepresented groups (including the Latin American community)?

I think as a society, there have been efforts to start discussions, to better understand the different challenges communities have when trying to take advantage of opportunities they are given. The problem, from my perspective, is of understanding. Limited opportunities, to few people who then are judged using a complete lack of understanding of the challenges they must overcome to produce the results they are demanded to obtain. When results are underwhelming, they feed onto the biases of those with access to resources to provide these opportunities, who in exchange limit access to people from these communities.

So understanding is the tool break the cycle, understanding needs to conduct to support mechanisms and affirmative action.

Which positive experiences have made you cope with the challenges of being underrepresented in the community?

Finding support communities with shared struggles. When you leave, pieces of your life, like a puzzle, are left behind, gaps make their way through. We all missed little parts, and for moments, when together, it felt like we were a whole, we completed each other. We reminded each other that is ok to be different. Build a support network.