Yevgeniy Dodis January 11, 2022

DIVERSITY STATEMENT

My family came to the United States as refugees from the former Soviet Union, where Jewish people were constantly discriminated, harassed and not given fair access to the same resources (e.g., admissions to top universities) as the general population. I still recall the amazing feeling of suddenly having the opportunities that I could never have dreamed of in the former Soviet Union. Nevertheless, my childhood is a constant reminder that, as a faculty member, it is my responsibility to create diverse teaching environments, and to help under-privileged students and under-represented minorities in any way I can to achieve their full potential.

I was fortunate to get my PhD from MIT, where I met the most incredible people from diverse backgrounds, and then to land at New York University, which is one of the most diverse and culturally rich places in the country. As such, I was given the chance to both teach and advise many members of under-represented groups. For example, I have a long track record of advising and collaborating with female students/researchers. I successfully advised 3 female PhD students, two of them are professors at top academic institutions (City College of New York and Indian Institute of Science), while the other (Adriana Lopez-Alt) is a Principle Security Engineer at Square (after spending 5+ years at Google). Adriana is a "double-minority", as she was born and raised in Columbia (the country Latin America), where there are very few opportunities to learn Computer Science. Despite that, Adriana was incredibly determined to succeed, and I feel fortunate to have had a chance to meet and advise her. Not surprisingly, Adriana flourished during her PhD, as can be seen from her winning prestigious AT&T Graduate Fellowship for Women, Microsoft Scholarship for Women in Computing, and Google Anita Borg Memorial Scholarship. As another example, I was also advising a female postdoctoral fellow (Siyao Guo), and played a major role in hiring her as an Assistant Professor at NYU Shanghai. As the co-organizer of NYC Theory Day [1] for 20+ years, my co-organizers and I always made sure to have at least one female speaker at every meeting but one. I have also written research papers with 27 female researchers. During faculty recruitment, my colleagues and I are always paying special attention to minority candidates, and generally have excellent track record in making offers to deserving minority candidates (although we wish more would have accepted, but we always try our best).

Overall, I have always been committed to promoting diversity in science, and looked for more opportunities to do so. For example, I recently volunteered to be one of the mentors in the Courant Undergraduate Research Program [2] at NYU, which is a new program aiming to "maximize opportunities for students to be connected to top-notch faculty, and to learn in an environment that embraces a diversity of perspectives and recognizes the values and unique experiences that those from historically underrepresented communities bring to the table." I am excited to be part of this initiative.

I would like to highlight three personal stories which have deeply affected me, as I felt that my help played a small role in changing the students' life.

STORY 1. First story is about a NYU Masters student Deja Bond. This story is well documented [3, 4], because Deja became the first African American woman to receive advanced degree in data science from NYU. One of the "hurdles" on her way was to take the required algorithms class. Deja was a very bright and dedicated student. Unfortunately, she had absolutely no background in Computer Science. Moreover, as NYU Center of Data Science was still under development, the students there had to temporarily take the same Algorithms classes as our usual (and much netter prepared) Computer Science students. This was really unfair, and made it especially challenging for me to teach the class, as half of the students were noticeably better than the rest. To add to this, Deja was one of the lesser prepared Data Students, and really struggled with the course. I saw her will and dedication, as she came to every office hour (and we scheduled many extra meeting as well), but it was taking her too long to catch up to the better prepared students. While following the standard practice to the letter means that I should have failed her, I felt it was not her fault, and she clearly wanted to learn. Additionally, failing the class would put her in a tight financial spot, as she would have to pay for the class again. As I result, I made a unilateral decision to give her an "incomplete", because I believed in her, and was confident that by the second time around she would pass the class. Indeed, this is what happened, and the rest is a well documented success story [3, 4].

STORY 2. The second story is about a Chinese student Yanquing Yao. Yanquing came from a very small Beihang university in China which is not known for its technical strength. However, Yanquing was looking for opportunities to learn in the United States. She managed to get permission to audit classes famous Tsinghua University, won a Fellowship to come to the USA, and a colleague of mine recommended that I give her a chance to visit NYU. I talked to Yanquing, and felt that this is worthy of the risk, even though she never

took a cryptography class before. After coming to NYU, Yanquing took my advanced cryptography class, and worked extremely hard. When I gave her a research project at the end of the class, I frankly expected her to basically write a survey article on the subject, like most other students. Instead, she actually solved the main open problem in the area in a very elegant way. Moreover, our paper was accepted to CRYPTO'15 [5] — the *very top* conference in Cryptography. Prior to that, no student from Beihang University had a paper at such a prestigious international venue. As a result, based solely on our publication, Yanquing was offered an assistant Professor job there, which she gladly accepted. Thus, her research visit literally changed her life. I still get Christmas cards from her every year, and her success story always makes me smile.

STORY 3. Finally, I often recall my very first year at NYU 20 years ago, and my very first undergraduate Cryptography class that I was teaching. Having almost no teaching experience, I made this class much harder than I should have, and students naturally were struggling. Nevertheless, I soon noticed one student name — Dana Glassner (now Dana Dachman-Soled) — who was very silent, but always got a perfect score on every homework. I decided to investigate, and met a super-bright young woman from Yeshiva University, who only took classes at NYU because there were no corresponding classes at Yeshiva back then. I quickly realized how talented Dana was, and gave her a challenging research project. Dana did really well. So well that she became the finalist of the prestigious *Computing Research Association Outstanding Undergraduate Award*! This is a very prestigious award, and little did I know that I would not meet another such talented undergraduate in my next 20 years. But what makes this success story so special to me, is that my class also changed her life. Dana felt in love with Cryptography, did her PhD, got Microsoft Postdoctoral Fellowship, joined University of Maryland, and recently got tenure there. She is now chairing a very prestigious Information-Theoretic Cryptography Conference, but I still remember her 20 years ago when she took my very first cryptography class.

References

[1] NYC Theory Day. https://cs.nyu.edu/home/research/theory-day.html.

[2] Courant Undergraduate Research Program (CUSP). https://cds.nyu.edu/curp/.

[3] Deja Bond (GSAS '20) Press Release. Available at https://www.nyu.edu/alumni/news-publications/class-of-2020-profiles/deja-bond.html.

[4] Philadelphia Tribune.
Philly native is first African American woman to receive advanced degree in data science from NYU.
Available at https://www.phillytrib.com/news/local_news/philly-native-is-first-african-american-woman-to-receive-advanced-degree-in-data-science-from/article_9a97776d-ddc3-517a-80a4-af592642336e.html.

[5] Yevgeniy Dodis and Yanquing Yao, "Privacy with Imperfect Randomness", Advances in Cryptology - CRYPTO, August 2015.