Viet Tung Hoang

I view diversity and inclusion as a must in higher education, because this is a main route to provide social justice and equity to historically marginalized communities. Having grown up in a low-income family in Vietnam, I understand viscerally the disadvantages of being in an underrepresented group, and the importance of education for marginalized communities. While CS faculty are now required to have diversity services for NSF grants, I am willing to go beyond the routine requirements, because I feel strongly that I have a social responsibility to lower the educational barriers for people from underrepresented groups. I support the diversity cause in a broader sense than what is typically construed, and my commitment is consistently reflected throughout my teaching, research advising, and outreach services.

INCLUSIVE TEACHING. To provide an inclusive classroom, I strive to remember all students by name, and make sure that I pronounce them correctly by checking with students and using tools such as NameCoach. I ask students to work in pairs during class discussions and homework, assign students to groups randomly, and rotate the group members often to ensure that there is no self-segregation and no students are "last chosen". This practice significantly increases the class rapport and improves the learning.

To improve the accessibility of my course material, I frequently use metaphors to explain abstract concepts better, and provide alternative geometric views. This is crucial for visual learners, but it also helps other students to capture the big pictures instead of getting lost in the details of formalism.

With the help from the FSU Office of Distance Learning, I use weekly feedback forms and a very detailed mid-semester survey to timely adjust the class in response to student feedback. In the last few years, I have received many thank-you letters from students (several from the underrepresented groups) for my teaching and caring.

ADVISING. I have a track record of successfully advising students in underrepresented groups. From 8/2018 to 3/2019, I worked with a Hispanic student (David Miller) to publish a paper at a top cryptography venue. This success inspired David to pursue a Ph.D. program in the University of Utah. From 10/2017 to 4/2019, I unofficially mentored Ni Trieu, a female Ph.D. student from Oregon State University. Our work broke a NIST standard, yielding two papers at top cryptography venues. Ni is now an assistant professor at Arizona State University.

OUTREACH SERVICES. I am a faculty advisor for the Florida Georgia Louis Stokes Alliance for Minority Participation (FGLSAMP), an NSF-funded consortium of undergraduate students from underrepresented minorities in STEM fields at FSU. My duties are to advise FGLSAMP students for how to prepare to get into a top graduate school, and give them feedback on their applications.

I also participate in the "Scientist in Every Florida School" initiative of the Thompson Earth Systems Institute. This program aims to connect Florida K-12 teachers in low-income schools with scientists to provide "science role models and experiences that inspire the next generation." Under this program, in Spring 2022, I visited the Central Park Elementary school to give a tutorial on cryptography, tell my personal stories on a research career, and clarify many misconceptions about cybersecurity research.

I am also a part of an inclusion initiative of the FSU Center for Intensive English Studies (CIES) that targets international visiting students at CIES. In Fall 2022, I joined a panel of faculty to talk with CIES students, providing them guidelines for how to prepare academically for college and how to find university resources to improve social integration, especially during the pandemic.

FUTURE PLANS. I plan to continue my service with FGLSAMP in the future. Due to the pandemic,

now remote advising is the norm, and thus I can continue this service even if I move to a different institution. To have a better reach for students in underrepresented groups, I plan to volunteer in the Widening Participation activities of the Computing Research Association. This programs assigns female undergraduate students (possibly from a different institution) for me to host in my research lab. To fund these activities, I plan to apply for a post-award REU supplement for my CAREER grant. In addition, as a service for my CAREER award, I have been discussing with the FSU Office of STEM Teaching Activities about the feasibility of adding a one-week unit on problem solving with algorithmic direction to the computer science curriculum of the Young Scholars Program. This is a summer science and math program for high-school seniors from throughout Florida who have significant potential in science and mathematics.