TANYA DAS

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Education

Ph.D., Electrical and Computer Engineering, University of California, Santa Barbara, 2017
M.S., Electrical and Computer Engineering, University of California, Santa Barbara, 2013
B.S., Electrical and Computer Engineering, University of Michigan, Ann Arbor, 2011

Professional Experience

Democratic Professional Staff Member, House Science, Space, and Technology Committee
Energy Subcommittee 08/2018 – present
Environment Subcommittee 08/2018 – 01/2019

- Developing and advancing bipartisan legislation on a range of topics including climate change; industrial emissions; technology transfer; energy equity; regional innovation; energy storage; grid modernization; advanced computing; materials science; artificial intelligence; and cyber security
- Leading the Committee's manufacturing portfolio on topics including the Manufacturing USA program; the Economic Development Administration's Regional Innovation Strategies Program; and the impacts of COVID-19 on the manufacturing sector
- Conducting oversight of the Department of Energy's (DOE's) research, development, and demonstration programs
- Planning hearings and briefings; staffing members of Congress; and drafting remarks, hearing questions, memos, and press releases
- Mentoring junior staff to advance their personal and professional development
- Helping develop the Committee's climate change agenda for the 116th Congress, including legislation and oversight of the DOE, Environmental Protection Agency, and National Oceanic and Atmospheric Administration
- Drafted and introduced 7 bipartisan bills in the 116th Congress, 6 of which passed the House and Senate

American Association for the Advancement of Science (AAAS) Congressional Fellow 10/2017 – 07/2018
Office of Senator Christopher A. Coons (D-DE)

- Advanced the Senator's priorities in technology transfer; advanced manufacturing; small businesses; and workforce development including through his role as Co-Chair of the Senate Competitiveness Caucus
- Authored and introduced legislation on expanding apprenticeships and improving partnerships between small businesses and DOE national labs, and passed into law legislation on improving cyber security for small manufacturers under the National Institute of Standards and Technology Manufacturing Extension Partnership
- Staffed the Senator at hearings and events; drafted memos and remarks; and authored press releases

Manufacturing USA institute, Workforce Development Team 04/2016 – 04/2017
American Institute for Manufacturing Integrated Photonics (AIM Photonics)

- Collaborated with photonics industry leaders to identify workforce needs and skills gaps in jobs requiring a range of education levels from GED to doctoral degree holders
- Studied barriers to successful public-private partnerships in the Central California Photonics industry

Diversity and Inclusion in STEM, Graduate Student Program Evaluator 01/2016 – 03/2016
University of Washington

- Studied effectiveness of interventions aimed at improving academic success of, retention rates of, and degree attainment by Science, Technology, Engineering, and Math (STEM) students from underrepresented racial, gender, and economic backgrounds
- Collected and analyzed qualitative and quantitative data using statistical analysis and informational interviews

Engineering Education, Graduate Student Program Evaluator 05/2015 – 06/2017
University of California, Santa Barbara (UCSB)

- Designed teaching improvements for a Mechanical Engineering design course by studying best practices in undergraduate engineering education
- Evaluated effectiveness of pilot teaching improvements through statistical analysis, surveys, and focus groups

Volunteering and Outreach

Clean Energy for Biden (CE4B) Volunteer 05/2020 – present

Recruited team leaders and supported hundreds of volunteers in the battleground states of Minnesota and Texas; authored policy papers; and organized fundraisers, including one that raised $7,000, to help elect Vice President Joe Biden and Senator Kamala Harris

Photonics Society Student Chapter, External Affairs Chair, UCSB 08/2016 – 06/2017

Led External Affairs for 40-person student-run organization to plan educational conferences, seminars, and outreach activities for lay audiences in the Santa Barbara community on the topic of light-based technologies

Beyond Academia Conference Co-Founder, UCSB 03/2015 – 06/2016

Part of a core team that managed 30+ volunteers to found, organize, and fundraise for a conference to help PhD students and post-doctoral scholars explore nonacademic career paths

Graduate Students for Diversity in Science Volunteer, UCSB 11/2014 – 06/2017

- Mentored undergraduate students who come from underrepresented racial and economic backgrounds to improve their chances of getting accepted into STEM PhD programs
- Developed workshop and training materials to help underrepresented students interested in pursuing STEM PhD degrees improve GRE scores

Juvenile Probation Center Poetry Workshop Coordinator, Santa Barbara County 03/2014 – 06/2014

Founded and led 10-15 person weekly workshops at juvenile probation center to help teens who have committed crimes use poetry as an outlet for working through difficult personal issues

Solar Car Team Interim Engineering Director, University of Michigan 05/2009 – 01/2010

Managed onboarding and training for 50 mechanical, electrical, and aerospace engineers in designing, building, and testing solar car systems

Professional Development

Asian Pacific American Institute for Congressional Studies (APAICS) Congressional Leadership Academy

Congressional Fellow 08/2020 – 12/2020

Engaged in training and career coaching through competitive fellowship program that hones leadership and management skills in Congressional staff of Asian American and Pacific Islander (AAPI) decent

Securing America's Future Energy

Energy Security Fellow 10/2019 – 08/2020

Competitive fellowship program to advance a national conversation on the future of United States energy independence through the lens of national security in roundtable discussions with industry and policy leaders

Peer-Reviewed Publications

- **T. Das**, J.A. Schuller, "Dark modes and field enhancements in dielectric dimers illuminated by cylindrical vector beams," Physical Review B, 95, 201111, 2017
- T. Susko, **T. Das**, I. Ben-Yaacov, F. Bullo, L. Lenaburg, "A coupled course design to strengthen multidisciplinary engineering capstone design projects," ASEE National Conference Proceedings, 2016
- **T. Das**, L. Lenaburg, T. Susko, "Assessment of an Undergraduate Engineering Design Capstone Course" ASEE Pacific Southwest Regional Conference, Apr. 2016
- **T. Das**, P.P. Iyer, R.A. DeCrescent, J.A. Schuller, "Beam engineering for selective and enhanced coupling to multipolar resonances," Physical Review B, 92, 241110, 2015
- J. Foley, A. Itsuno, **T. Das**, S. Velicu, and J. Phillips, "Broadband long-wavelength infrared Si/SiO2 subwavelength grating reflector," Optics Letters, 37, 1523-1525, 2012

Selected Honors and Awards

- Published 2 first-author manuscripts in academic journal Physical Review B that were each selected as Editor's Suggestions, a designation reserved for the top 5% of manuscripts published in an issue
- Selected for University of California, Santa Barbara Broida-Hirschfelder Dissertation Fellowship, 2016
- Awarded Honorable Mention AAAS Meeting Student Poster Award in Education, 2016