BPC Departmental Plan
Halicioğlu Data Science Institute
UC, San Diego

Effective dates of plan: Fall 2021-Fall 2023
Contact: Saura Naderi - snaderi@ucsd.edu - BPC Academic Coordinator

1. **Context**

   UC San Diego is an R1 research institution with approximately 30,000 undergraduate and 7,000 graduate students. Of the undergraduate population, 2.9% are African American / Black, .4% are American Indian / Alaska Native, 21.8% Chicano / Latino, and .2% are Native Hawaiian / Pacific Islander. We will use underrepresented groups (URGs) to refer to people from these racial and ethnic groups. It is home to the Halicioğlu Data Science Institute (HDSI), founded in Spring 2018, an academic unit offering an undergraduate program in Data Science both as a major, as well as a minor, for students drawn from multiple disciplines across the campus. HDSI has also designed and proposed three graduate degree programs in Data Science: PhD and MS degrees in Data Science as well as an online Masters of Data Science degree jointly with the Computer Science department. HDSI also has an active program with over a dozen industry partners and non-profit organizations.

   The HDSI community is intellectually diverse, with many faculty holding joint appointments across multiple disciplines including physical sciences, philosophy, social sciences, humanities, engineering, and management. Community members also represent a diversity of backgrounds, demographics, and cultural experiences. At its founding, inclusivity and diversity were explicitly listed as one of its strategic planning goals: "*cultivating a diverse and inclusive university community that encourages respectful open dialogue, and challenges itself to take bold actions that will ensure learning is accessible and affordable for all. The three core tenets pursuant to this goal are: Access and Success, Climate, and Accountability.*" To support this commitment, all newly hired faculty are provided with startup funds of $30,000 to be used for activities that promote diversity and inclusion.

   HDSI has 838 undergraduate majors, 26% of whom are women. Race/ethnicity data is not currently available, but collecting this information is one of our planned activities.

2. **Goals:**

   Goal 1: **Improve Accountability:** Produce an annual report on demographic and climate data that will be shared with the EDI department of UC San Diego, HDSI DEI Committee and Faculty Council.

   Goal 2: Community Programs: By spring 2022, conduct at least three outreach programs at Title 1 schools where the majority of students are from racial or ethnic groups that are underrepresented in computing.

   Goal 3: Community Building: Develop and/or expand at least 2 programs that support current students per year.

3. **Activities and Measurement: Saura Naderi is the point of contact for all activities.**

Activity 1:(G1) Collect demographic information for the entire pipeline for students [application, enrollment through graduation and beyond], faculty [recruiting, interview, hiring, promotion], and staff [recruiting, interview, hiring, promotion]. **Metrics:** # of data threads collected.

Activity 2:(G1) Administer CRA Data Buddies survey and analyze information on the climate experienced by our student population. **Metrics:** # student participants, outcome of survey

Activity 3:(G2) Identify and expand on currently available data science related university BPC outreach programs that impact the K-14 community. **Metrics:** # of activities offered, # of schools participating that have a majority of students from URGs.

Activity 4:(G2) Lab 3.0 is an HDSI program which is currently being developed specifically to broaden participation in data science by attracting underrepresented students in computing in the K-14 community through hands-on and virtual data science activities, career awareness activities, and long-term data science projects. **Metrics:** # of activities offered, # of schools participating that have a majority of students from URGs, survey participants

Activity 5: (G2) Pathways2AI aims to broaden participation in Artificial Intelligence among K-12 students by offering classroom visits by faculty, video-led hands-on activities, and summer camps. **Metrics:** # of activities offered, # of schools participating that have a majority of students from URGs, survey participants

Activity 6:(G2) Data science-related REU opportunities for students from minority serving institutions are offered by HDSI and elsewhere on campus. **Metrics:** # of participants who come from minority serving institutions, participant demographics.

Activity 7:(G3) In Fall 2020, HDSI created a DEI Committee which is compiling a set of guidelines, mechanisms and practices that support an inclusive environment for the Institute. The HDSI DEI committee will host events for the community and include student participation. **Metrics:** # of activities sponsored, demographics of student participants

Activity 8:(G3) In Spring 2021, the DEI Committee supported the implementation of the student-initiated "Diversity in Data Science" student organization and will continue to support this organization. **Metrics:** # of activities offered, demographics of student participants

Activity 9: (G3) UCSD HDSI will sponsor student attendance at major BPC-focused conferences, including Tapia, Grace Hopper, oSTEM, and SACNAS. **Metrics:** #conferences attended, # of student and faculty participants

Activity 10: (G3) Identify and recruit a diverse pool of industry representatives and alumni to serve as speakers or to mentor students from groups that are underrepresented in computing. **Metrics:** # of industry participants, # of paired mentorships, demographics of student participants