<u>HB-2121</u> Submitted on: 2/2/2018 8:00:48 PM

Testimony for EDB on 2/7/2018 10:45:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kaulana Dameg		Support	No

Comments:

HB-2121

Submitted on: 2/6/2018 12:29:42 AM

Testimony for EDB on 2/7/2018 10:45:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Russel Cheng	Dev League LLC	Support	No	

Comments:

Please see the attached PDF testimony in support of HB2121.

Mahalo!

Russel Cheng



2800 Woodlawn, Ste. 100 | 808-539-3806 Honolulu, Hawaii 96822 | www.htdc.org

Written Statement of Robbie Melton

Executive Director & CEO
Hawaii Technology Development Corporation
before the

House Committee on Economic Development & Business And

House Committee on Higher Education

Wednesday, February 07, 2018 10:45 a.m. State Capitol, Conference Room 309

In consideration of
HB2121
RELATING TO WOMEN IN TECHNOLOGY AT THE UNIVERSITY OF HAWAII

Chairs Evans and McKelvey, Vice Chairs Keohokalole and Hashem, and Members of the Committees.

The Hawaii Technology Development Corporation (HTDC) supports the intent of HB2121 that establishes a Center for Women in Technology within the University of Hawaii, Department of Information and Computer Sciences.

As part of HTDC's vision to create 80,000 new innovation jobs in Hawaii earning \$80,000 or more by 2030, HTDC supports initiatives aimed at promoting technology and innovation jobs. HTDC agrees that greater female participation in computer science programs is desired by both the industry sector and the state. HTDC defers to UH on the implementation of this measure.

Thank you for the opportunity to offer these comments.



david.miyashiro@hawaiikidscan.org hawaiikidscan.org

David Miyashiro Executive Director

February 7, 2018

Committee on Economic Development & Business Rep. Cindy Evans, Chair Rep. Jarrett Keohokalole, Vice Chair

Committee on Higher Education Rep. Angus L.K. McKelvey, Chair Rep. Mark J. Hashem, Vice Chair

State Capitol 415 South Beretania Street Honolulu, HI 96813

Aloha Chairs Evans and McKelvey, Vice Chairs Keohokalole and Hashem, and Members of the Committee,

HawaiiKidsCAN supports HB 2121, which establishes a Center for Women in Technology within the University of Hawaii's Department of Information and Computer Sciences.

Founded in 2017, HawaiiKidsCAN is a nonprofit organization committed to ensuring that Hawaii has an excellent and equitable education system that reflects the true voices of our communities and, in turn, has a transformational impact on our children and our state. HawaiiKidsCAN is a branch of 50CAN: The 50-State Campaign for Achievement Now.

HawaiiKidsCAN is supporting HB 2121 to build momentum for greater equity in our schools, and more opportunities for students of all backgrounds to engage in high-quality computer science (CS) education. Knowledge of CS, and other science, technology, engineering and math (STEM) subjects, will clearly go hand-in-hand with success as our diverse economy evolves. Between 2017 and 2027, STEM-related occupations are projected to grow by 8 percent in Hawaii, compared to just 4 percent for all other occupations. In particular, some of Hawaii's fasting-growing occupations between 2014 and 2024 will require CS experience, including web development (26 percent growth), computer systems analysis (20 percent growth) and software development (18 percent growth). These and other Hawaii STEM jobs carry a median hourly wage of \$40.45, more than twice the median hourly wage of \$19.64 for all other jobs.

^{1 &}quot;ECS Vital Signs: STEM Demand Hawaii." Education Commission of the States. http://vitalsigns.ecs.org/state/Hawaii/demand

² Software development includes systems software and applications software. "Employment Projections for Industries and Occupations." August, 2016. Hawaii Workforce Infonet. https://www.hiwi.org/admin/gsipub/htmlarea/uploads/Long-TermProjections-2014-2024-State.pdf

³ "ECS Vital Signs: STEM Demand Hawaii." Education Commission of the States. http://vitalsigns.ecs.org/state/Hawaii/demand

The tremendous change catalyzed by technology will of course reach far beyond Hawaii, with some reports suggesting that automation may eliminate a third of our nation's jobs by 2030.⁴ Yet large swaths of our young learners, especially girls and women, lack equitable opportunities for CS education—a disparity that leads to workforce inequities. Data shows that women constitute just 26 percent of employees in computing jobs, and just 30, 15 and 10 percent of tech roles in major companies Google, Facebook and Twitter, respectively.⁵ These numbers are especially troubling when we consider the value of diverse workplaces, from greater innovation⁶ to more startup success.⁷

While the urgency of this crisis is clear, there is no simple solution; we must examine the entire pipeline from K-12, higher education and the workforce. That means giving all students access to quality CS courses and learning opportunities. Given that few Hawaii public schools offer AP CS, and just 32 percent of AP test takers were female students in 2017, we have lots of work to do. HB 2121 is a meaningful step in the direction of equity and long-term success.

The Center for Women in Technology at the University of Hawaii would be a critical resource for both our students and our industries by ensuring a strong transition from our K-12 education system and the workforce of the future. Through this center, the University of Hawaii could pioneer a welcoming and supportive tech field for female students, in turn developing an everwidening pool of STEM role models and mentors for young girls. Locally, this shift in culture and representation could have a tremendous impact on women who seek employment at existing tech companies, but also those who will acquire the confidence and skills to create new companies, and new opportunities, of their own.

Hawaii has the potential to lead the way for gender equity in CS so we must act with urgency and a comprehensive approach. HawaiiKidsCAN supports HB 2121 as one such powerful act.

Mahalo for the opportunity to testify,

David Miyashiro Founding Executive Director HawaiiKidsCAN

^{4 &}quot;Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation." Manyika, J. et al. *McKinsey Global Institute*. December 2017. https://goo.gl/GLShNP

^{5 &}quot;The Stats On Women In Tech Are Actually Getting Worse." Peck, E. *Huffington Post*. December 6, 2017. https://www.huffingtonpost.com/2015/03/27/women-in-tech_n_6955940.html

^{6 &}quot;Diversity in Business Really Does Boost Innovation, According to a New Study." FastCompany.com. January 12, 2018. https://goo.gl/V2Ba2f

⁷ "Data Doesn't Lie: Tech Firms Need to Hire More Women to Succeed." Lacy, S. Wired.co.uk. December 27, 2017. http://www.wired.co.uk/article/sarah-lacy-gender-bias-silicon-valley.

Testimony Presented Before the House Committees on Economic Development & Business and Higher Education February 7, 2018 at 10:45 a.m.

By

Donald O. Straney, Vice President for Academic Planning and Policy University of Hawai'i System

HB 2121 – RELATING TO WOMEN IN TECHNOLOGY AT THE UNIVERSITY OF HAWAII

Chairs Evans and McKelvey, Vice Chairs Keohokalole and Hashem, and members of the committees:

Thank you for the opportunity to present testimony regarding HB 2121 which establishes a Center for Women in Technology within the University of Hawai'i, Department of Information and Computer Sciences.

The University of Hawai'i supports the intent of this measure, however, does not feel that the creation of a statutory section is required to accomplish this. The University has a strategic goal of increasing science, technology, engineering, and mathematics (STEM) degrees, and recognizes that targeted outreach, learning, mentoring and other programs help to increase the number of women in such programs.

We would like to clarify that increasing women in STEM, including computer science, are efforts across ten-campuses, led by the UH System, and not specific to a single campus. Initiatives are already underway. Some examples:

The University of Hawaiii Community College system office was awarded a
National Science Foundation ADVANCE grant for its project, "Building
Relationships to Increase Diversity and Gender Equity" (BRIDGE). The five-year,
\$1.1 million project will work with the seven community colleges to improve
recruitment, retention, promotion, and success of women faculty in all STEM
fields. The BRIDGE grant supports women in all STEM fields, including, but not
limited to, computer science.

The project also has a partnership element between the UH CCs and UH Hilo, using virtual tools to connect remote island campus locations in mentoring and coaching trainings for administrators and senior faculty.

The UH President's Commission on the Status of Women, with commissioners appointed from all campuses and the system, has agreed to be a member of the Advisory Board for the BRIDGE program, and discusses issues such as disparities of women employees or students in the STEM fields.

- Maui College's NSF grant awarded for "Capacity Building: Cyber-Security Education across Disciplines with Focus on Minorities and Women," which includes working with high schools.
- Society of Women Engineers at UH Mānoa, established to build community, network with local professional women engineers, and demonstrate the value of diversity in this career field.
- "Girls Who Code" free workshops hosted by Hawai'i Community College for girls in grades 6-12, affiliated with a national nonprofit association Girls Who Code.
- The "Exploring Diversity and Gender Equity" (EDGE) project which had been awarded to UH Hilo, and aligned with the NSF-ADVANCE goal to increase representation and advancement of female faculty in STEM and in academic leadership positions.

With the variety of ongoing efforts in a range of technology fields, the University would be pleased to work with the committee toward crafting a resolution focusing on this important issue.

Thank you for the opportunity to provide these comments.

HB-2121

Submitted on: 2/6/2018 10:37:23 AM

Testimony for EDB on 2/7/2018 10:45:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	OCC Legislative Priorities	Support	No

Comments:

PRESENTATION OF THE

OAHU COUNTY COMMITTEE ON LEGISLATIVE PRIORITIES

DEMOCRATIC PARTY OF HAWAII

TO THE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS, AND

COMMITTEE ON HIGHER EDUCATION

HOUSE OF REPRESENTATIVES

TWENTY-NINTH LEGISLATURE

REGULAR SESSION OF 2018

Wednesday, February 7, 2018

10:45 a.m.

Hawaii State Capitol, Conference Room 309

RE: **Testimony in Support** of HB 2121, RELATING TO WOMEN IN TECHNOLOGY AT THE UNIVERSITY OF HAWAII

To the Honorable Cindy Evans, Chair; the Honorable Jarrett Keohokalole, Vice-Chair, and Members of the Committee on Economic Development and Business:

To the Honorable Angus L.K. McKelvey, Chair; the Honorable Mark J. Hashem, Vice-Chair, and Members of the Committee on Higher Education:

Good morning. My name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") Legislative Priorities Committee of the Democratic Party of

Hawaii. Thank you for the opportunity to provide written testimony on House Bill No. 2121 regarding the Center for Women in Technology at the University of Hawaii.

The OCC Legislative Priorities Committee is in favor of House Bill No. 2121 and support its passage.

House Bill No.2121 is in accord with the Platform of the Democratic Party of Hawai'i ("DPH"), 2016, as it establishes a Center for Women in Technology within the University of Hawaii, Department of Information and Computer Sciences.

Specifically, the DPH Platform provides that we "support initiatives that enhance access and equity in education, employment, and business opportunities intended to lift families and individuals out of poverty and remove existing barriers to equal opportunity in our communities." (Platform of the DPH, P. 4, Lines 189-191 (2016)).

"We recognize that the responsible use and development of technology in all its manifestations offers immense potential for our community, government, including institutions of higher education and business sectors. We encourage synergistic research, development, commercialization and educational programs to promote technological proficiency and innovation. In particular, we support Science, Technology, Engineering and Math (STEM) initiatives in our public, private and charter schools as these prepare the next generation to address the needs of our state. We also support programs that facilitate incubator, i.e. start-up, opportunities for new and promising technologies, and encourage the local retention of our intellectual resources." (Platform of the DPH, P. 3, Lines 149-156 (2016)).

Given that House Bill No. 2121 establishes the Center for Women in Technology at the University of Hawaii, it is the position of the OCC Legislative Priorities Committee to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,

/s/ Melodie Aduja

Melodie Aduja, Chair, OCC Legislative Priorities Committee

Email: legislativeprorities@gmail.com, Tel.: (808) 258-8889