

Akamai Internship Program:

Advancing the Next Generation of Hawaii's STEM Professionals

Akamai is a program for Hawaii college students, placing them with summer projects at telescopes and tech industry in Hawaii.

The goals are to keep students in STEM, and increase participation of groups currently underrepresented* in STEM.

The following slides report recent outcomes.

*African American/Black, Hispanic/Latinx, Native American/Alaska Native, Native Hawaiian/Pacific Islander



Four Akamai alumna who are now engineers at the Daniel K. Inouye Solar Telescope on Maui

Akamai interns complete a project at a Hawaii telescope or tech company



Organizations that have mentored Akamai interns include (# of interns):

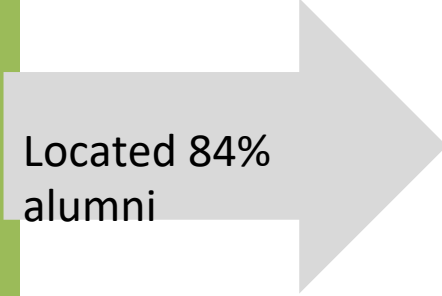
W. M. Keck Observatory (48)
Institute for Astronomy, Maui (39)
Gemini Observatory (37)
Subaru Telescope (31)
Akimeka (30)
SMA/ASIAA (29)
Trex (23)
Institute for Astronomy, Hilo (23)
Canada-France-Hawaii Telescope (22)
AF Research Lab/MHPCC (22)
Hnu Photonics (19)
Thirty Meter Telescope (18)
Oceanit (15)
DKIST (14)
Pacific Disaster Center (14)
Textron (11)
UH Hilo (11)
Centauri/PDS (10)
NELHA (8)
PISCES (5)
UC Observatories (4)
Boeing (3)

Outcomes measured by tracking STEM career progress of Akamai alumni

428 Akamai alumni (2003-19):

- 37% Women
- 23% Native Hawaiian
- 47% All underrepresented minorities

Located 84%
alumni



Key questions answered on next slides:

- How many students stay in STEM?
- Are there gaps between demographic groups for those staying in STEM?
- How many are now in the Hawaii STEM workforce?

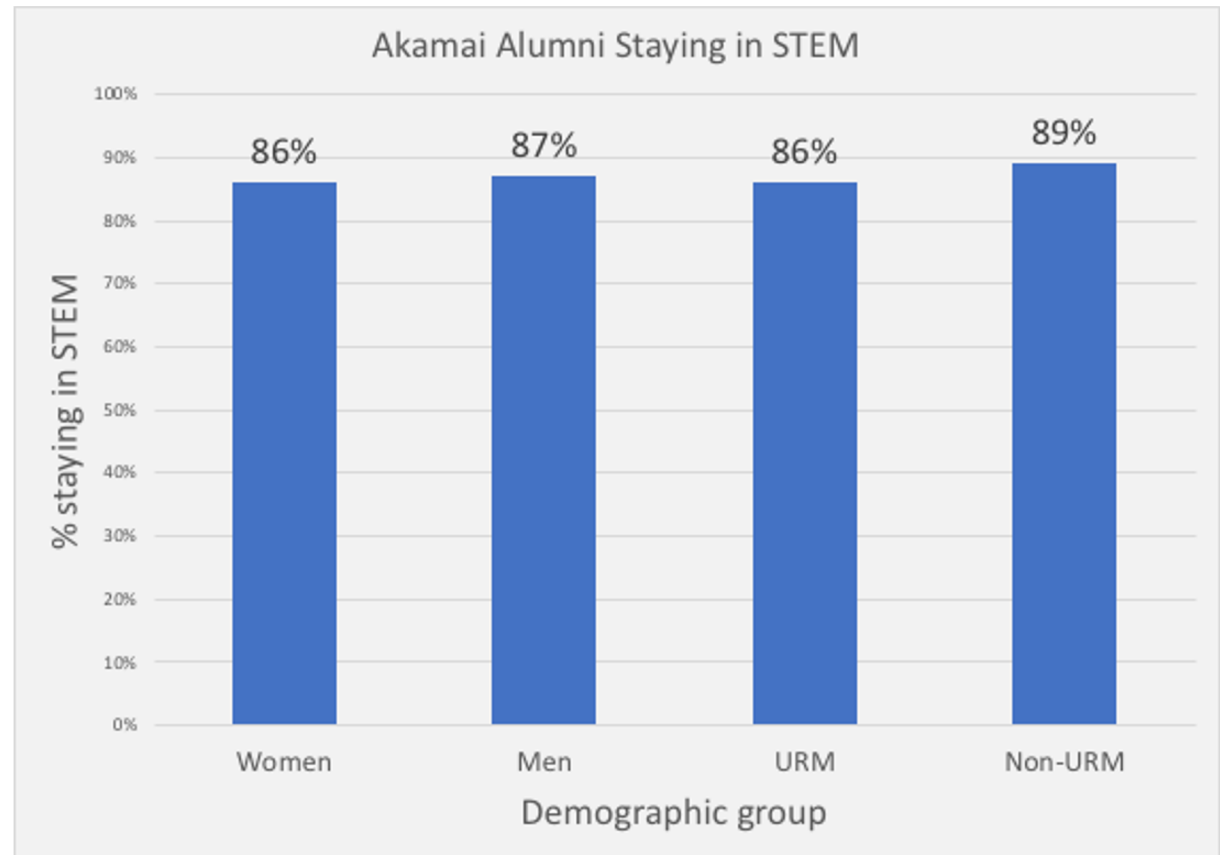
3 years after program: 88% of Akamai alumni stay in STEM

Nationally, about 40% of college freshmen who start as STEM majors complete a STEM degree

Subset: 2003-16 alumni (completed program 3+ years ago)	
Alumni of this subset located	82%
%’s below calculated from the 82% of participants located	
A. In STEM Workforce	81%
B. Enrolled in STEM as undergrad or grad	7%
C. On STEM Pathway (A+B)	88%

All gender and ethnic groups stay in STEM at the same high rate of ~88%

Nationally, about 20% of URM students complete STEM degrees, compared to 40% for white and Asian



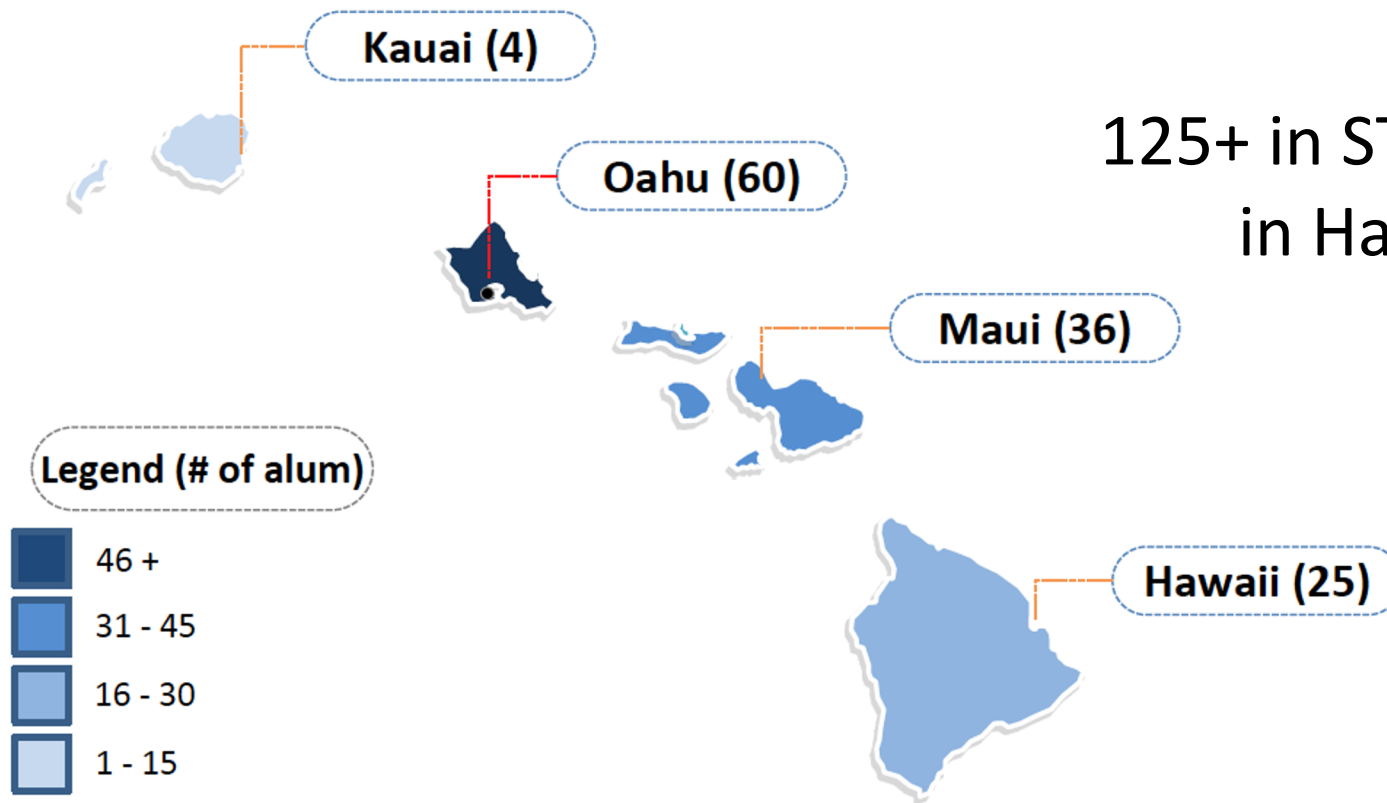
“Staying in STEM”= enrolled or working in STEM

URM=Native Hawaiians and other underrepresented minority groups

At least 125 Akamai alumni (all cohorts: 2003-19) have STEM jobs in Hawaii

256+ in STEM jobs
in Hawaii and beyond

125+ in STEM jobs
in Hawaii



Akamai is led by the
Institute for Scientist & Engineer Educators
at University of California, Santa Cruz
in partnership with University of Hawaii,
and Hawaii telescopes and tech
organizations

Akamai funders
(in order of funding level):

National Science Foundation (NSF)
U.S. Air Force
Thirty Meter Telescope
University of Hawaii
Hawaii Community Foundation
NSF Daniel K. Inouye Solar Telescope
University of California Observatories
W.M. Keck Observatory
Maunakea Observatories
Canada-France-Hawaii Telescope

In 2018 ISEE was given a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM), the highest US award for mentoring.



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