ANITA BORG INSTITUTE

GRACE HOPPER
CELEBRATION OF WOMEN IN COMPUTING

2013 Evaluation & Impact Report

Co-founded by Dr. Anita Borg and Dr. Telle Whitney in 1994 and inspired by the legacy of Rear Admiral Grace Murray Hopper, the Anita Borg Institute's Grace Hopper Celebration (GHC) of Women In Computing Conference is designed to connect, inspire and guide women technologists at all stages of their careers.

GHC is the world's largest technical conference for women in computing.

For 13 years, GHC has brought together the community of women technologists, the best minds in computing and increased visibility for the contributions of women to computing. The conference is produced by the Anita Borg Institute (ABI), and co-presented with the Association of Computing Machinery (ACM).

The 2013 GHC conference theme "**Think Big. Drive Forward**" was designed to encourage women technologists to think big and follow their dreams. We recognize that women are transforming technology every day through their unique perspectives and unparalleled skills.

The theme was exemplified in the opening conversation with Telle Whitney (President & CEO, Anita Borg Institute), Sheryl Sandberg (COO, Facebook and Founder of LeanIn.org) and Maria Klawe (President, Harvey Mudd College).

Keynote addresses by Megan Smith (Vice President, Google [x]) and Valerie Taylor (Senior Associate Dean of Academic Affairs, Dwight Look College of Engineering, Texas A&M University) inspired women in industry and academia to pursue their dreams. Listed below are some of the invited technical speakers for 2013:

• Sheila Nirenberg, Professor of Computational Neuroscience in Computational Biomedicine at Weill Cornell Medical College and recipient of a 2013 MacArthur Grant

• Brenda Chapman, Academy Award winner and first woman to direct an animated feature film, Brave

• Thad Starner, Professor, Georgia Institute of Technology and Technical Lead/Manager on Google's Project Glass

Global in scope and influence, the 2013 conference drew **4758 attendees** from **53 countries**, representing **353 companies** and **409 academic institutions.**

Conference tracks emphasized innovation in the fields of Software Engineering, Mobile Experiences, Media and Entertainment, Medical Technology and Education Technology. Additional sessions were dedicated to professional development for women technologists in Industry and Academia.

GHC 2013 received unprecedented quality rating of 4.52.

Attendance grows by 32%

2013 GHC Attendee Evaluation

Participant feedback from the 2013 GHC evaluation confirms that GHC continues to provide a forum for women technologists from myriad backgrounds to share information, learn about new technologies, find role models and inspiration, network, and build community.

GHC 2013 attendees gave the overall conference a 4.52 rating out of 5.0. Between 78%-95% of conference attendees who responded to the survey rated all aspects of the conference as good or excellent.

Conference Survey - Ratings of Excellent or Good
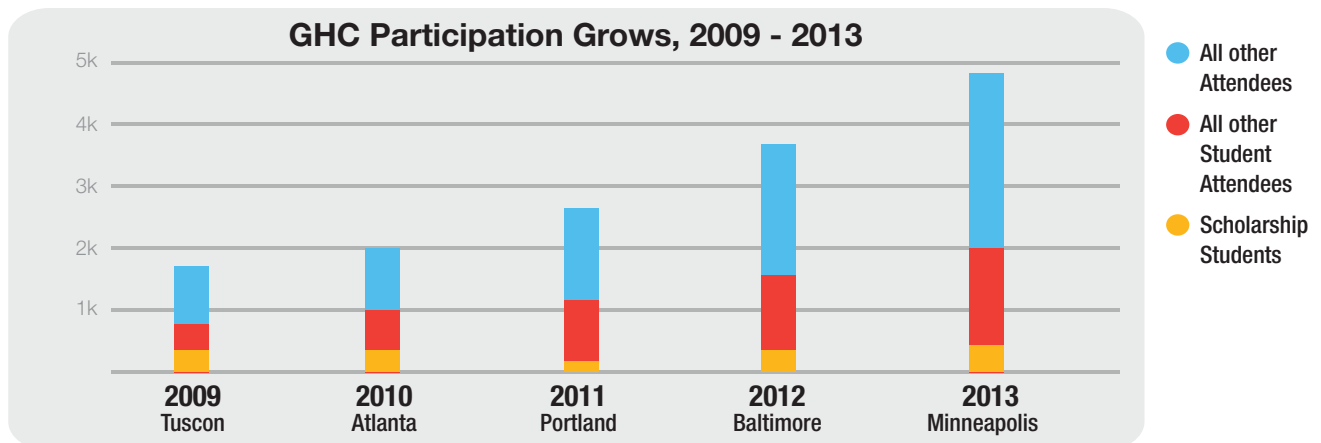
95% OVERALL QUALITY

92% ADMINISTRATION AND LOGISTICS

91% NETWORKING AND COMMUNITIES

94% FELT INSPIRED

78% RELEVANCE OF TECHNICAL TOPICS

86% RELEVANCE OF PROFESSIONAL DEVELOPMENT TOPICS

GHC Participation Grows, 2009 - 2013

Legend:
- All other Attendees
- All other Student Attendees
- Scholarship Students

Year	Location
2009	Tuscon
2010	Atlanta
2011	Portland
2012	Baltimore
2013	Minneapolis

2013 GHC Attendee Profile

4,758
individual attendees,
a **32%** increase over 2012

53
countries represented
29% increase over 2012

409
academic institutions

29
government agencies

353
companies
65% increase over 2012

338
scholarships awarded

Participant Type

40% 1,910
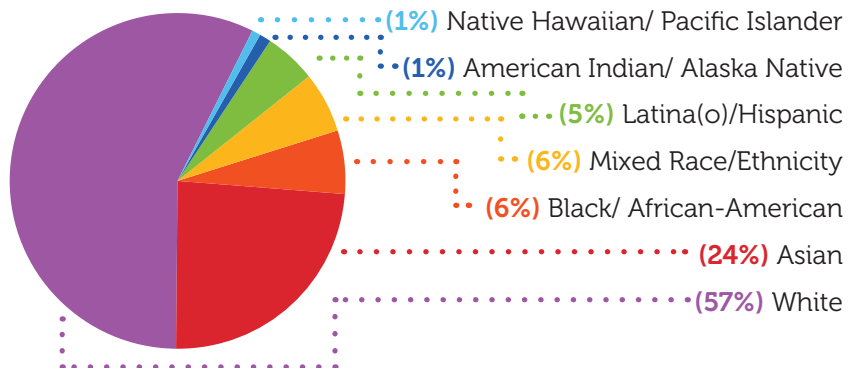STUDENTS

44.5% 2,118
INDUSTRY PROFESSIONALS

6.5% 313
ACADEMIC
PROFESSIONALS

4% 171
GOVERNMENT/ LAB
NON-PROFIT PROFESSIONALS

5% 276
ATTENDEES IN TRANSITION,
SELF-EMPLOYED AND RETIRED.

Ethnicity and Race

GHC 2013 was enriched by the diversity of its attendees. Survey respondents who provided their racial and ethnic background provide a sense of the broad perspectives attendees bring to the conference. 13% of respondents are under-represented minorities.

(1%) Native Hawaiian/ Pacific Islander

(1%) American Indian/ Alaska Native

(5%) Latina(o)/Hispanic

(6%) Mixed Race/Ethnicity

(6%) Black/ African-American

(24%) Asian

(57%) White

2013 GHC Attendee Impact

ABI's programs facilitate women's participation and achievement in technology fields – and transforms technical structures and cultures in doing so.

To examine how well program goals were met for the 2013 Grace Hopper Celebration, survey responses to multiple questions measuring "impact" are analyzed. These numbers are suggestive of program efficacy in reducing barriers for women in computing, sharing key strategies for success, and inspiring participants to take action.

> "This conference changed my life. It helped me to face the current challenges that I have in establishing my career. The Career Fair, the networking events, the inspirational talks. It made a life-changing impact in my professional and personal life."
> - GHC 2013 attendee

Overcoming Barriers

Of 1,757 responses to the survey, most agreed or strongly agreed that attending GHC had the following impact:

93% felt inspired by the role models they saw at GHC 2013.

79% feel less isolated as a woman in technology as a result of attending GHC 2013.

77% increased their commitment to their chosen career.

64% significantly expanded their network of technical women.

> "I met some fantastic people and got to see old friends. I feel like community is one of the strongest things pulling me back to GHC year after year."
> - GHC 2013 attendee

Taking Action

Respondents reported the following intentions as a result of attending the conference:

36% will advocate for change in their teams, departments or organizations.

15% intend to start a LeanIn Circle.

13% joined one or more online communities.

8% started a mentor-mentee relationship.

7% joined Systers.

Overall, the evaluation results suggest that the Grace Hopper Conference plays a positive role in attendees' career development. Nearly all respondents were inspired by role models at GHC, more than three-quarters of female respondents feel less isolated as women in technology, three-quarters of all respondents reported that GHC increased their commitment to their chosen careers, and almost two-thirds perceived that attending GHC has increased their networks of women in technology.

Profiles of Student Attendees

Student respondents to the GHC 2013 survey were primarily undergraduates majoring in computer science or informatics.

Current Degree Program

67% BACHELOR'S (B.A., B.S., ETC.)

12% MASTER'S (M.A., M.S., M.B.A., M.F.A., ETC.)

15% Ph.D.

Students with declared majors/fields include:

71% COMPUTER SCIENCE INFORMATICS

3% MATHEMATICS / APPLIED MATHEMATICS

5% COMPUTER ENGINEERING

3% INFORMATION SYSTEMS / SCIENCE

3% ELECTRICAL ENGINEERING

Conference Value to Student Attendees

Student respondents agreed that attending GHC:

Career and degree commitment

- 71% increased their commitment to complete their current degree programs.
- 85% increased their commitment to a technology career.

Reducing feelings of isolation

- 83% feel less isolated as women in technology.

Inspiration

- 95% feel inspired by the role models they saw at the conference.

Network ties

- 67% significantly expanded their network and provided them with opportunities to be mentored.

Career Fair Results

- 40% submitted resumes to the Resume Database.
- 29% had at least one interview for a job or internship during the conference
- 6% received an offer for a job or internship on the spot.

Profiles of Industry Attendees

Respondents to the GHC 2013 survey were predominantly Technical/Individual contributors across all stages of a career, most likely in the Software and Programming profession. The results indicate that a large majority of career professionals realized significant value in attending GHC.

"Women from all walks of technical life came there and totally dropped their egos and their titles. They were there for each other not because they were the VP or a Director or an Intern. It didn't matter. All that mattered was Technology is a place where women can thrive."

- GHC 2013 attendee

Conference Value to Career Professionals

	Early Career	Mid-Career	Senior
Career Commitment	71%	72%	74%
Reducing Feelings of isolation	79%	76%	78%
Inspiration	96%	91%	89%
Network	65%	59%	62%

Types of work

	Early Career	Mid-Career	Senior
Technical or individual Contributor	83%	62%	49%
Management/Sales/Marketing	3%	23%	41%
Human Resources/Diversity/Recruiting	14%	15%	10%

Industries Represented

60%+ Software and Programming

17%+ Internet Services

8%+ Financial Services

14%+ Computer Services, Computer Hardware, Computer Networks and Other

GHC 2013 Session Ratings

In addition to providing open-ended comments, survey respondents were asked to rate the quality of each of the presentations they attended on a scale of 1 to 5 (very poor to excellent). The following table lists mean scores, organized by program order (Not applicable responses are excluded.)

	ALL GROUPS COMBINED	
WEDNESDAY SESSIONS	**N**	**MEAN**
Welcome and For the Newcomers Session	739	4.13
Sheryl Sandberg, in Conversation with Maria Klawe and Tell Whitney	1057	4.73
Career Fair Launch	743	4.44
Scholarship Recipients Lunch (By Invitation Only)	209	3.94
Senior Women in Computing Networking Lunch (By Invitation/Application)	51	4.18
Leadership Workshop: Move Your Career Forward	339	4.32
Student Opportunity Lab - Pathways to Your Future	306	4.03
WEDNESDAY - SESSION 1		
Be More Strategic! Stories & Tips From Experienced Technical Women Panel	249	4.19
Technology Visionaries Panel	155	4.15
Graduate School Survival Skills Presentation	92	4.26
Finding your Dream Job Presentation	155	4.10
Funding Workshop	50	3.92

WEDNESDAY - SESSION 2	N	MEAN
Using Volunteer Opportunities to Drive Forward Your Career Panel	173	3.94
Integrated Leadership for the 21st Century Workshop	161	4.02
Publishing Your Research Presentation	108	3.98
Starting and Growing Your Own Research Program Presentation	58	4.05
Career Success After Tenure Workshop	55	4.33

WEDNESDAY - SESSION 3	N	MEAN
Think Agile: Drive Your Life Forward Workshop	184	3.55
How to Get on the Board of a Public Technology Company Presentation	116	4.58
Building Your Professional Network Presentation	147	4.12
Preparing for Promotion Presentation	77	4.22
Effective Leadership & Creating Change Workshop	89	4.30

WEDNESDAY SESSIONS	N	MEAN
General Poster Session	440	4.10
ACM Student Research Competition	122	4.24
Latinas in Computing Reception	52	4.46
Black Women in Computing Meetup	48	4.21
Faculty Meetup	30	4.10
LGBT Meetup	56	4.38

THURSDAY - SESSIONS	N	MEAN
Keynote – Megan Smith	889	4.45
Awards Ceremony	296	4.34
Post Awards Presentation Dancing	309	4.50

THURSDAY - SESSION 4

	N	MEAN
Keeping the YouTube Generation Engaged	154	4.14
PhD Forum – Mobile Track	86	4.13
Elaine Weyuker – Invited Technical Speaker	176	3.96
Multiple Presentations on Medical Technology	61	4.31
CS Principles and the CS 10K Initiative	79	4.30
Best of Minnesota, Leader in Medical Innovations Panel	54	3.74
Design Principles 101 Workshop	114	4.20
Intrapreneurship: How Your Entrepreneurial Spirit Thrives in Corporate America Panel	129	3.99

THURSDAY - SESSION 5

	N	MEAN
PhD Forum & New Investigators – Media & Ent Track	54	4.30
The Mobile Experience: Adapting in a Dynamic Industry Panel	146	3.79
The Technology Behind My Social World! Workshop	82	3.80
Sheila Nirenberg – Invited Technical Speaker	138	4.56
Faculty Careers in CS at Liberal Arts Colleges	50	4.46
Computing on Wheels BOF`	50	4.02

THURSDAY - SESSION 5 cont.	N	MEAN
Building Leadership Skills: A Diverse Perspective – UWiC PANEL	120	4.16
"Quiet" Success Panel	188	4.28

THURSDAY - SESSIONS

	N	MEAN
Women of Color Lunch	78	4.76
LGBT Lunch	41	4.73
Research Labs Lunch	31	4.42
Lunchtime Table Topics	92	3.80

THURSDAY - SESSION 6

	N	MEAN
Lightning Talks on Mobile	197	4.05
Faculty Lightning Talks	95	4.34
ABI Lean In Circles Presentations	154	4.41
ACM SRC Competition (Undergrad) Presentations	35	4.57
UWiC Speed Mentoring	61	4.30

THURSDAY - SESSION 7

	N	MEAN
Lightning Talks on Gaming	138	4.11
Thad Starner – Invited Technical Speaker	189	4.52
API's and Software Process Presentations	117	3.96
Technologies Spark Techie Data Wars Panel	37	4.11
Service Learning for T-shaped Professional and Expanding the K-12 Pipeline BoF	38	4.29
ACM SRC Competition (Graduate) Presentations	29	4.48

THURSDAY - SESSION 7 cont.	N	MEAN
The New Industrial Revolution Panel	39	4.41
Staying (or Returning) and Succeeding on the Technical Track Panel	104	4.24

THURSDAY - SESSION 8

	N	MEAN
Breaking into Media and Entertainment as a New College Hire BoF	44	4.39
Software and Not So Smart Phones Providing Health Services in Africa BoF	60	4.62
Velocity vs Quality Panel	79	3.54
Innovating Medical Technology is Smart but Managing It is Smarter BoF	27	4.19
Computational Art Using Processing for CS0 Workshop	65	4.55
Solutions for Retaining Women Technologists Panel	71	4.23
Work to Live or Live to Work? Panel	131	4.31
Asking for What You Deserve: How to Negotiate for Yourself Panel	190	4.23
Don't Let Me Wait: Client-Side Optimization BoF	37	4.03

FRIDAY - SESSIONS

	N	MEAN
Keynote Speaker: Valerie Taylor	635	4.02
"Think Big. Drive Forward" – Plenary Session Featuring All the ABIE Award Winners	398	4.36

FRIDAY - SESSION 9

	N	MEAN
Brenda Chapman – Invited Technical Speaker	324	4.56
Native or Web, Which App Should I Build Panel	89	4.02

FRIDAY - SESSION 9 cont.

	N	MEAN
PhD Forum and New Investigators Presentations	38	4.34
Lightning Talks on Scalable Software	122	4.09
Navigating the Academic Job Search Panel	46	4.41
Margaret Martonosi – ABIE Technical Leadership Award Winner	29	4.83
The Inverted Classroom and Peer Instruction Workshop	55	4.42
Think Big: Start the Next Apple Panel	92	4.22
You Can Invent Panel	43	3.84

FRIDAY - SESSION 10

	N	MEAN
Why Are We Still Geeks? Correcting Media Images of Computer Science Panel	189	4.53
New Investigators Presentations	34	4.18
The 3 Faces of Technical Project Management BoF	66	3.86
Big Data: New Frontier for Innovation Panel	132	3.76
Setting Up & Running Emerging Scholars Workshops for Introductory Computer Science	30	4.33
Best of…Future Trends – Mobile First, Mobile Best	86	4.45
Pooja Sankar – Invited Technical Speaker	92	4.32
Lightning Talks on Career	126	4.54
Social Media Audit Workshop	28	4.39

FRIDAY - SESSIONS	N	MEAN
My Experience with MOOCS BoF	50	4.00
Faculty Lunch	29	4.03
Latinas in Computing Lunch	41	4.76
Systers Lunch	48	4.46
Lunchtime Table Topics	102	4.02

THURSDAY - SESSION 11

	N	MEAN
Augmented Reality & Entertainment Lightning Talks	133	3.95
Mobile User Experiences of Differently-abled Users in Uganda Panel	39	3.95
Data-driven Design Through A/B Testing Panel	100	3.70
Scale It Big, Scale It Forward Panel	80	4.26
Designing a Senior Faculty Career Mentoring BoF	19	4.47
Entrepreneur Should Really be a Verb not a Noun Workshop	54	4.26
Innovative Solutions in Attracting More Women in Computing Panel	90	4.16
Breaking Through the Concrete Ceiling/Avoiding the Glass Cliff: (UWiC)	63	4.21
Elise Foster – Invited Technical Speaker Workshop	71	4.49

FRIDAY - SESSIONS 12

	N	MEAN
Robotics/Web Lightning Talks	118	4.19
User Experience and Power: Requisites for Successful Product Design BoF	54	3.63

FRIDAY - SESSION 12 cont.

	N	MEAN
Software Applications & Futures Presentations	88	4.35
Cloud Services Acceleration Through Orchestration BoF	39	4.05
Getting Out of the Shallow End BoF	68	4.44
Best of...ACM SIGSOFT and SIGGRAPH Presentations	42	4.50
Video Scenarios: Computing as Creative Problem Solving Workshop	46	4.22

FRIDAY - EVENING OPTIONS

	N	MEAN
ABI Community Meetup	72	4.18
Friday Evening Celebration	684	4.49

TOP HIGHEST RATED SESSIONS

Margaret Martonosi – ABIE Technical Leadership Award Winner	4.83
Women of Color Lunch	4.76
Latinas in Computing Lunch	4.76
LGBT Lunch	4.73
Sheryl Sandberg, in conversation with Maria Klawe and Telle Whitney	4.73
Software and Not So Smart Phones Providing Health Services in Africa BoF	4.62
How to Get on the Board of a Public Technology Company Presentation	4.58
ACM SRC Competition (Undergrad) Presentations	4.57
Brenda Chapman – Invited Technical Speaker	4.56
Sheila Nirenberg – Invited Technical Speaker	4.56

BOTTOM LOWEST RATED SESSIONS

You Can Invent Panel	3.84
The Technology Behind My Social World! Workshop	3.80
Lunchtime Table Topics	3.80
The Mobile Experience: Adapting in a Dynamic Industry Panel	3.79
Big Data: New Frontier for Innovation Panel	3.76
Best of Minnesota, Leader in Medical Innovations Panel	3.74
Data-driven Design through A/B Testing Panel	3.70
User Experience and Power: Requisites for Successful Product Design BoF	3.63
Think Agile: Drive Your Life Forward Workshop	3.55
Velocity vs Quality Panel	3.54

SAVE THE DATE! OCTOBER 8 - 10

2014 Grace Hopper
Celebration of Women in Computing
Phoenix, AZ

www.gracehopper.org

ANITA BORG INSTITUTE
WOMEN TRANSFORMING TECHNOLOGY

ABI connects, inspires, and guides women in computing and organizations that view technology innovation as a strategic imperative. Founded in 1997 by computer scientist Anita Borg, our reach extends to more than 53 countries. We believe technology innovation powers the global economy, and that women are crucial to building technology the world needs. As a social enterprise, we recognize women making positive contributions, and advise organizations on how to improve performance by building more inclusive teams. www.anitaborg.org