Welcome!

2012 Michigan Tapestry Workshop

Michigan State University &

Oakland University

Getting on our internet

- REMOVED

ENGINEERING

Thanks for making the workshop possible:

TechSmith

NSF

national center for women & INFORMATION TECHNOLOGY

csta

Oakland UNIVERSITY

MICHIGAN STATE UNIVERSITY

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Organizers and Speakers

Joel Adams

Jim Cohoon

Joanne Cohoon

Laura Dillon

Laura Dinsmoor

Cathy Dinsmoor

Ann Drobnis

Susan Horwitz

Shannon Houtrouw

Wendy Johnson

Robert Luciano

Fatma Mili

Nilesh Patel

Robert Pennock

Seth Reichelson

Kelly Schultz

Stephanie Weber

Special Thanks

Joanne McGrath Cohoon & Jim Cohoon

- Principal investigators of the NSF Grant
- Conceived of and designed Tapestry Workshops
- Conducted training workshops and created materials (template for these slides ☺)

Purpose of the workshop

Share research-based, field-tested ways to

- Attract more and diverse students into computing

- Influence perceptions of computing's importance and its opportunities

- Better engage students in the excitement and rewards of computing
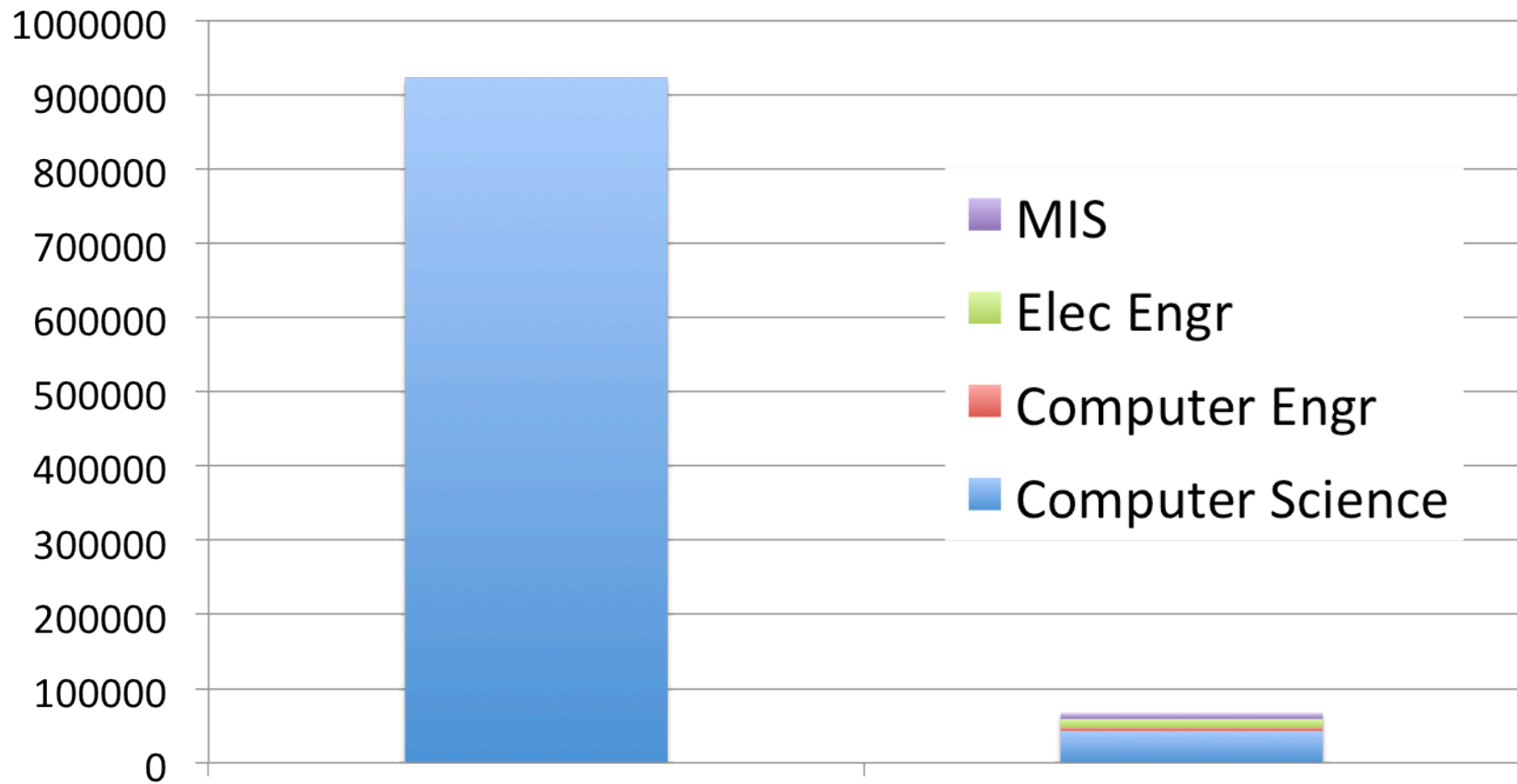
The Tree of Life, 1854

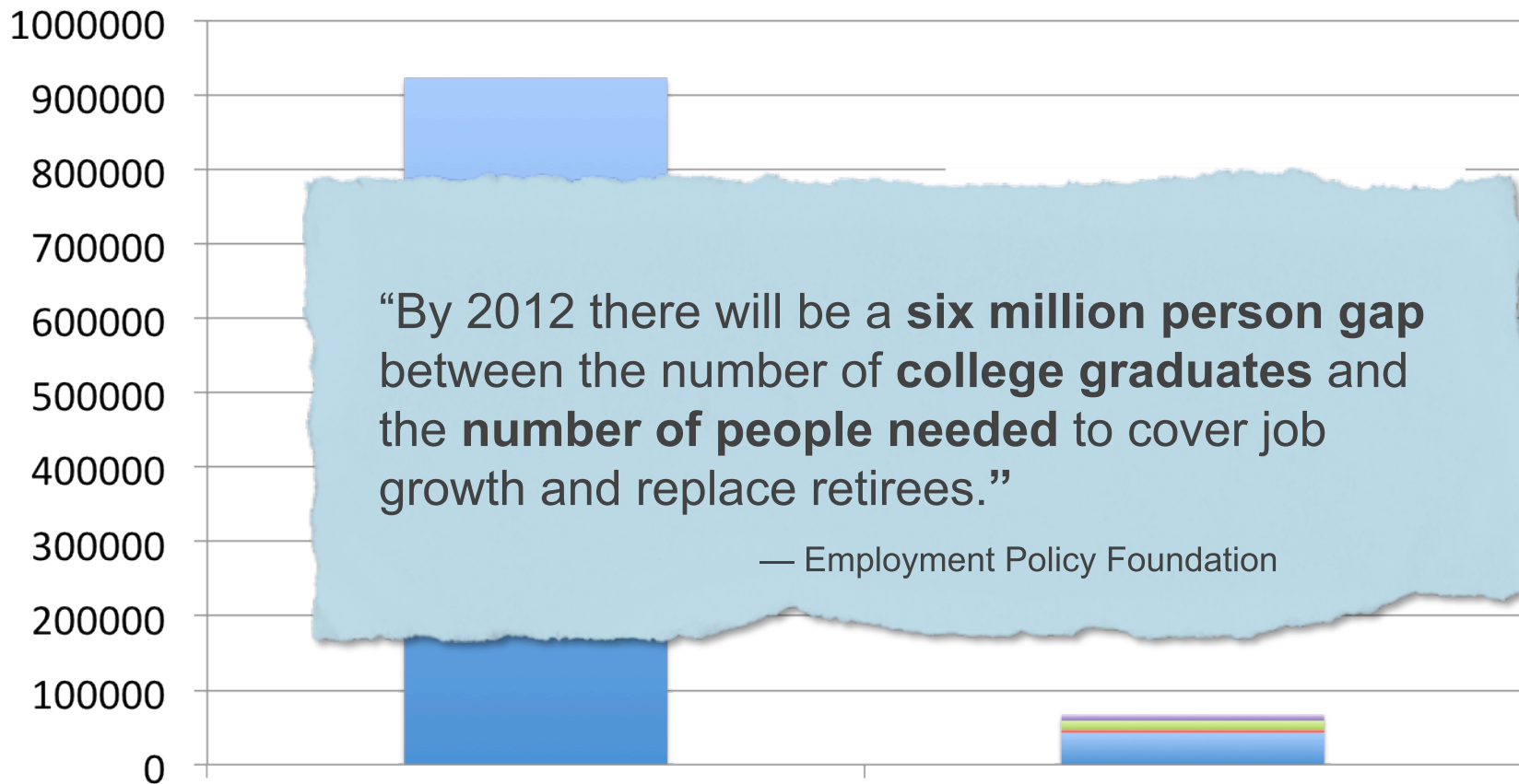# Listen and Share, then Apply

Why Bother?

The workforce is headed for calamity

Degrees = 2011, from IPEDS Completion data
BLS Data on 2020 projected job openings for largest computing occupations

The workforce is headed for calamity

"By 2012 there will be a **six million person gap** between the number of **college graduates** and the **number of people needed** to cover job growth and replace retirees."

— Employment Policy Foundation

Degrees = 2011, from IPEDS Completion data
BLS Data on 2020 projected job openings for largest computing occupations

Women and minorities are the untapped resource

- Women=57% professional jobs in the U.S. workforce, only 25% of CIT jobs.

- 56% of technical women leave their jobs at the mid-career point (double the rate of men)

- Given participation in the overall workforce, African Americans and Latinos in computing-related jobs should really be double what it is today.

– Lucy Sanders, NCWIT, 7/31

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Innovation suffers without diverstity
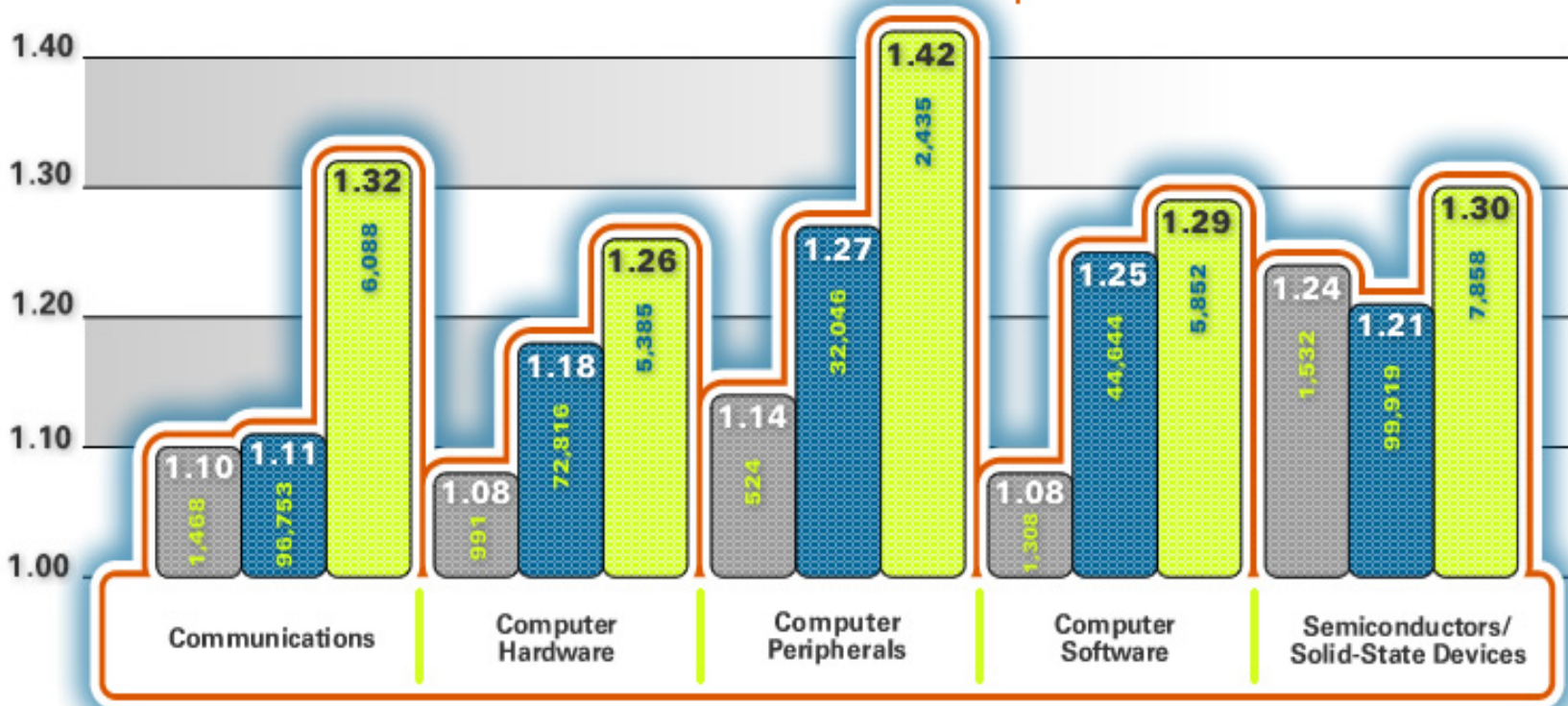
It's the right thing to do

Build cool stuff.

Sell cool stuff.

Do cool stuff.

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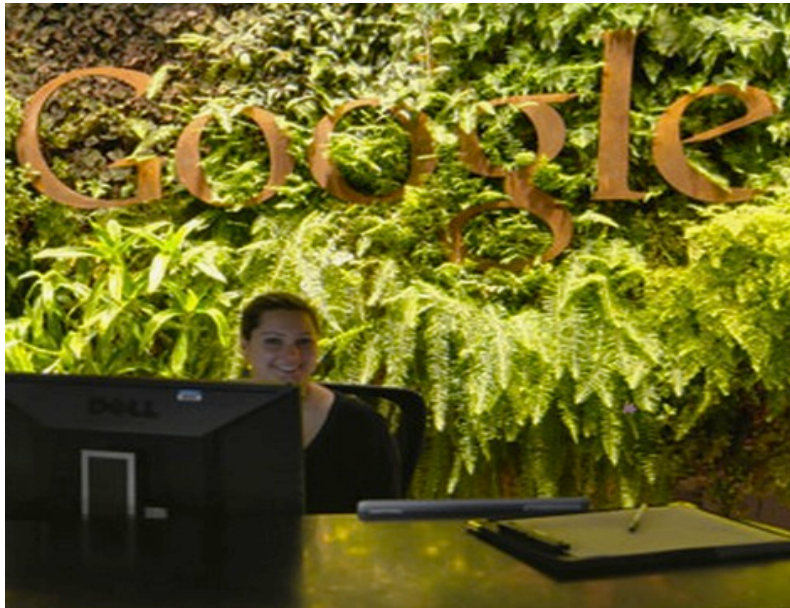
Access to meaningful, rewarding occupations

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Where are you from?

- 26 Michigan
- 1 Indiana
- 1 Ohio
- Also:
  - 1 Florida
  - 1 Pennsylvania

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What are your circumstances?

HS Location

Urban

Rural

Suburban

Numbers of students

```
1200
 800
 400
   0
      Programming        AP CS
```

HS Enrollment

> 2000

1000 - 2000

< 1000
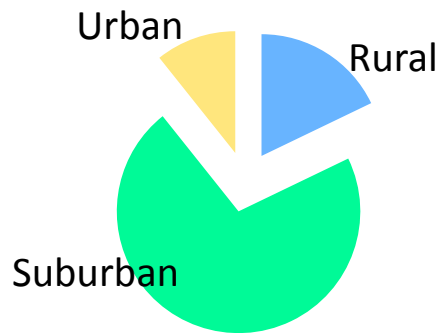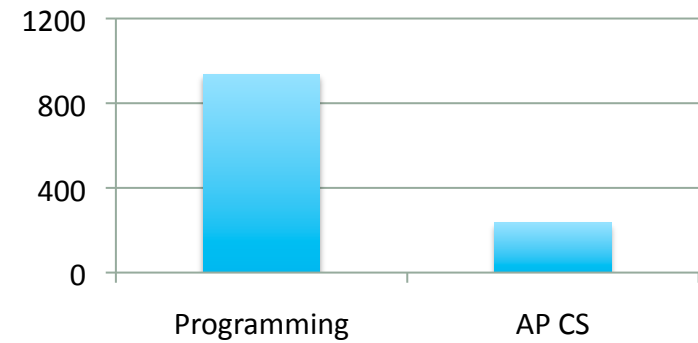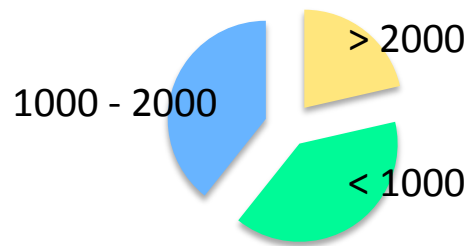
Composition of students

```
30%
20%
10%
 0%
      Programming        AP CS
```

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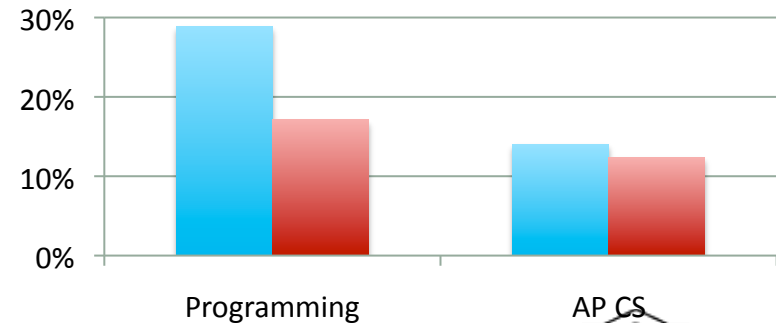
Your Top 5 Hopes for the Workshop

1. Effective **recruiting** methods, especially for women & minorities

2. **Pedagogy** that engages all types of students

3. **Sharing** with other CS or IT teachers

4. Effective **curricula**

5. Means of garnering **support** from administrators, parents, guidance counselors

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Your Hopes and Our Plans

	Recruiting	Pedagogy	Sharing	Curriculum	Support
Wed			Ice breaker Dinner (6:30) Brainstorm (4:30)	Pennock (3:00) Johnson (4:30)	Welcome (noon) Drobnis (12:30) Cohoon (1:30)
Thu	Cohoon (2:00) Reichelson (3:30)	Horwitz (8:20) Luciano (1:20)	Warmup (8:00) Lunch Breakout (4:15) Dinner (6:00)	Adams (10:35) Patel (11:35)	
Fri			Houtrouw (9:15) Your Plans (10:15)	Schultz (8:30)	Resources (8:00)

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Comments or Questions?