WOMEN IN COMPUTING

Thomas Misa
Charles Babbage Institute
University of Minnesota
tinyurl.com/cbi-women9
1. Women flood into computing (1843–1984)
2. Women “leave” computing (1985---)
3. CBI is interviewing women in computing: can you help us?
Women as computer pioneers: Ada Lovelace, Grace Hopper, Betty Holberton, Fran Allen...
• Women as computer pioneers: Ada Lovelace, Grace Hopper, Betty Holberton, Fran Allen...
WOMEN ‘INTO’ COMPUTING

- Women as computer pioneers: Ada Lovelace, Grace Hopper, Betty Holberton, Fran Allen
Women ‘INTO’ COMPUTING

• Women as computer pioneers: Ada Lovelace, Grace Hopper, Betty Holberton, Fran Allen

[Image of book cover and photos of women]
• Women as computer pioneers: 
  . . . Barbara Liskov\textsuperscript{T}, Shafi Goldwasser\textsuperscript{T}
Women as computer pioneers:
Ada Lovelace, Grace Hopper [1906–1992]
Women ‘into’ computing

Grace Hopper Celebration of Women in Computing

October 14th - 16th, 2015
George R. Brown Convention Center
Houston, Texas
WOMEN ‘LEAVE’ COMPUTING

- Women’s “peak” in computing (c.1985)
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- 37% computer science bachelor’s
Women’s “peak” in computing (c.1985)

- 37% computer science bachelor’s
- 38% US white-collar IT workforce

NCWIT [2013]
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But since then . . . (hard to believe)
Women’s “peak” in computing (c.1985)
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But since then . . . *(hard to believe)*
- 18% CS bachelor’s [2014] *down 1/2*

NCWIT [2013]
Women’s “peak” in computing (c.1985)

- 37% computer science bachelor’s
- 38% US white-collar IT workforce

But since then . . . (hard to believe)

- 18% CS bachelor’s [2014] down 1/2
- 26% US ... workforce [2012] down 1/3

NCWIT [2013]
What Happened To Women In Computer Science?

% Of Women Majors, By Field

- Medical School
- Law School
- Physical Sciences
- Computer science

Graph showing the percentage of women majors in different fields from 1970 to 2010.
WOMEN ‘LEAVE’ COMPUTING

Google images: ‘female computer scientist’
WOMEN ‘LEAVE’ COMPUTING

Google images: ‘female computer scientist’
WOMEN ‘LEAVE’ COMPUTING

Google images:
‘female computer scientist’
I’m only creating the design ideas, Barbie says, I’ll need Steven’s and Brian’s help to turn it into a real game.
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WOMEN ‘LEAVE’ COMPUTING
• **Gender Codes: Why Women are Leaving Computing** [2010]

• Sloan Foundation “Tripling Women’s Participation... (1965-85)” research on:
  - technical-professional women
  - working in industry 1960s–90s
Interview (c.60 mins) on work+career

At your home/office/CBI (UM west bank)
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