

Next week

- Final projects due!
- Meet in SME 305
- Print out your artist statement
- Prepare to talk about your piece for 3 minutes

Next Week

- Bring Back Stuff You Borrowed From the Lab
(and also from Jesse!!)

Women in Tech

Ada Lovelace 1815-1852



Ada Lovelace as visionary

- Wrote the first algorithm for Babbage's "analytical engine"
- Computers someday "might act upon other things besides number..."
- 1828 – produced a design for a flying machine

Legacy

- 1980 – US Dept. of Defense created a programming language named after her
- Ada Lovelace Day in October

Grete Hermann

- Published Computerized Algebra as her doctoral thesis in 1926
- Her algorithms are still in use today
- Also she was in to quantum mechanics

Grace Hopper 1906-1992



Grace Hopper as computer programmer

- Also studied and taught mathematics
- Wrote the manual for the Automatic Sequence-Controlled Calculator at Harvard
- Invented the compiler

Grace Hopper as visionary

- In 1949, conceptualized a wider audience for computers if tools were both programmer-friendly and application-friendly
- Pioneered efforts on UNIVAC I, the first digital computer
- Encouraged programmers to share code

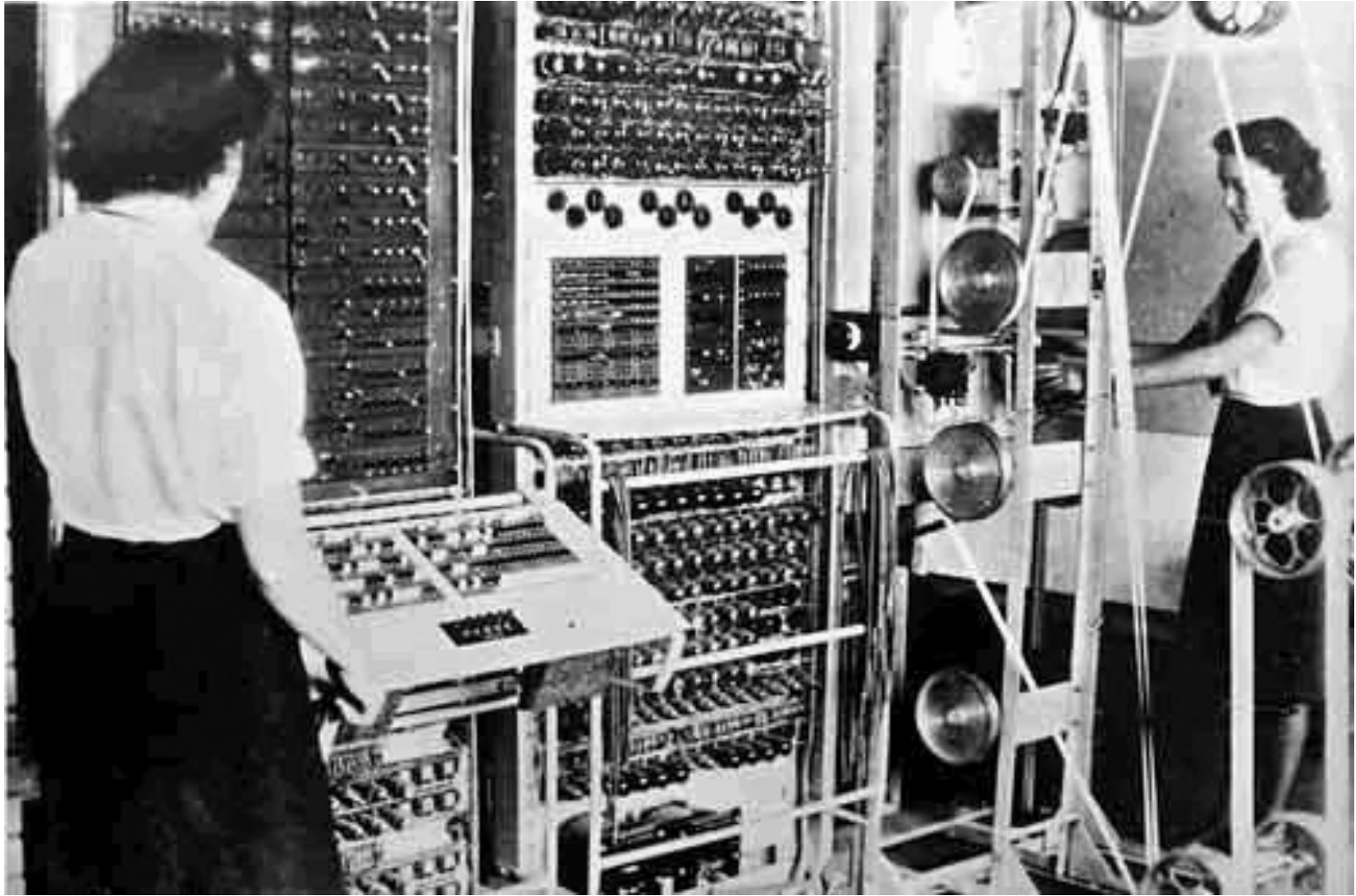
Grace Hopper Legacy

- 1969 – Awarded Computer Science Man-of-the-Year Award
- Grace Hopper Celebration of Women in Computing Conference

WWII computers

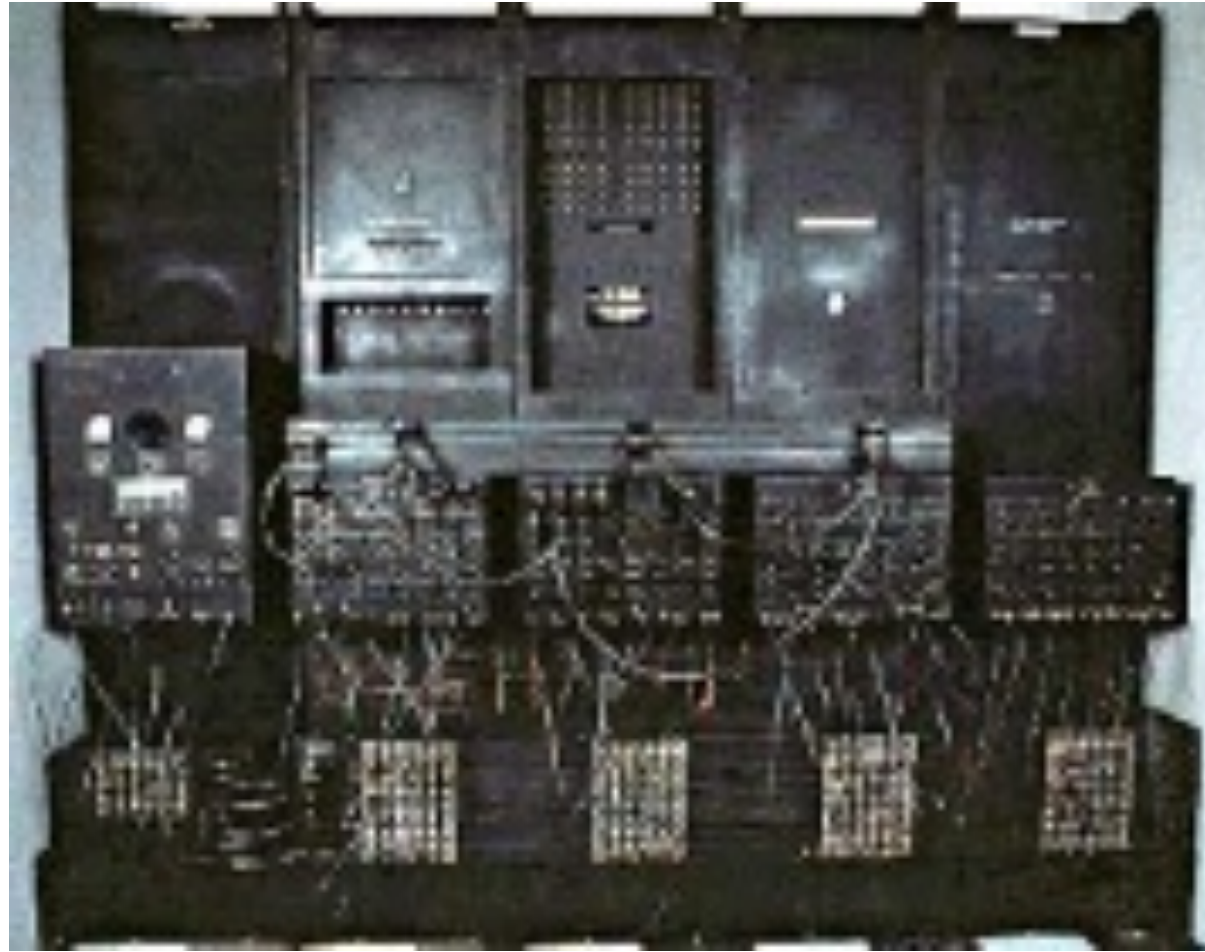


WWII Computers



ENIAC 1943- 1946

- Betty Jennings,
- Betty Snyder,
- Fran Bilas,
- Kay McNulty,
- Marlyn Wescoff,
- Ruth Lichterman



Hedy Lamarr

- Hollywood movie star
- Developed pre-cursor technology of frequency hopping in 1942 which Bluetooth, CDMA, and wifi are all based on
- Her frequency hopping patent was implemented by the military in 1962

Jean Sammet

- Developed FORMAC programming language in 1962
- Wrote about the history of computing and categorized computer programs

Mary Allen Wilkes

- Used the first home computer in 1965...
- That she built

Carol Shaw & Carla Meninsky

- Video Game Designers & Programmers
- Worked for Atari in early 80s

Susan Kare

- Graphic design & interface designer for Apple in the 80s

Jeri Ellsworth

- Created the C64 chip in 2004

Mary Lou Jepson

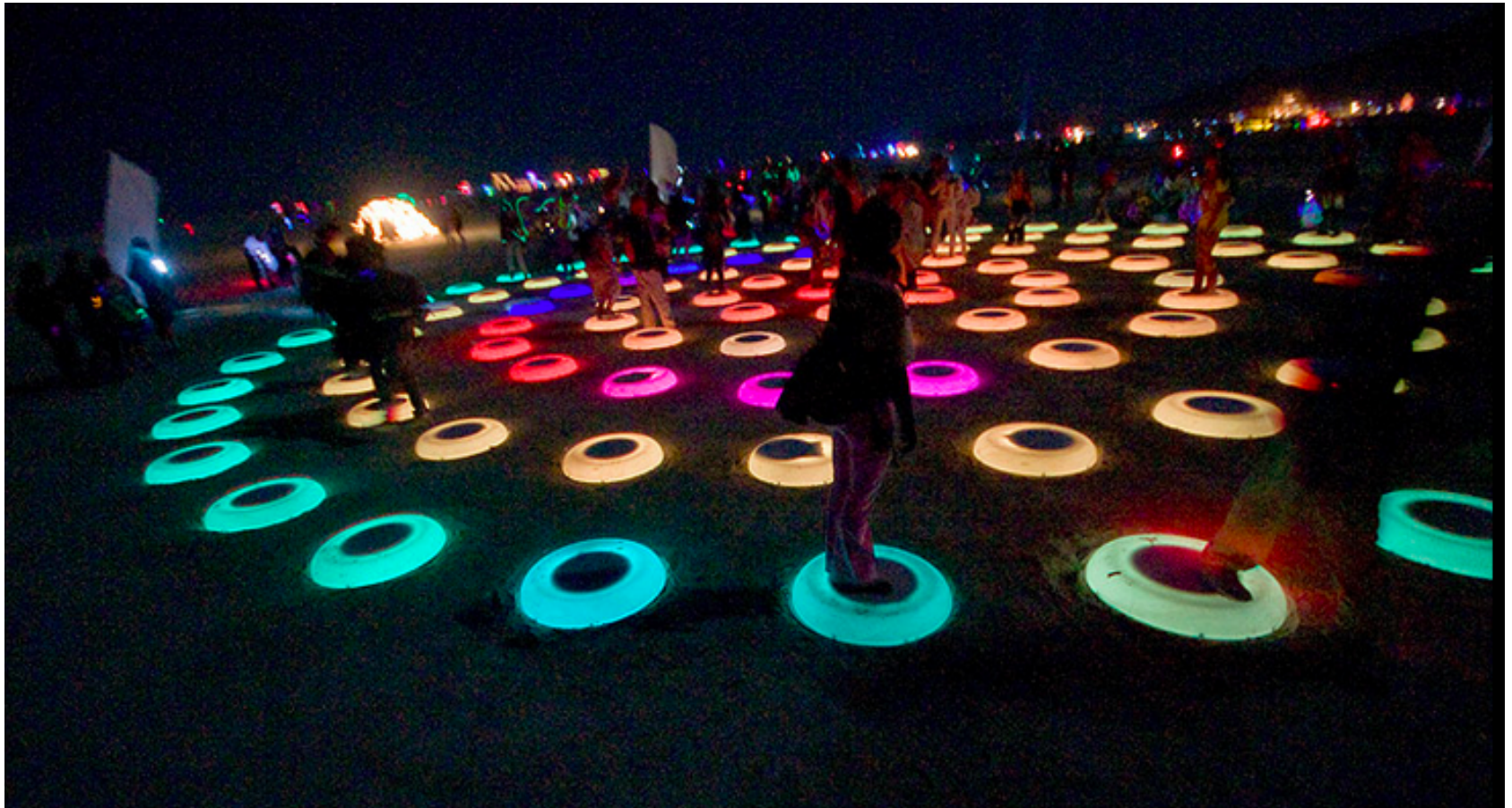
- Chief Technology Officer of OLPC - 2005

Pioneering women in Arduino

- Leah Buechley – LilyPad
 - Started the High Low Tech Lab at the MIT
- Limor Fried – Adafruit
 - has contributed lots of Arduino code

Pioneering Women in Art & μ C

- Jen Lewin



Pioneering Women in Art & μ C

- Kate Hartman



Pioneering Women in Art & μ C

- Becky Stern



Image from Sternlab

Pioneering Women in Art & μ C

- Diana Eng



Pioneering Women in Art & μ C

- Dia Campell



Further Reading on Gender & Tech

- Unlocking the Clubhouse by Jane Margolis & Allan Fisher
- When Women were Computers by Jennifer S. Light
- Signs: Journal of Women in Culture and Society 16(1)(1990). Special issue on gender and technology

WIC @ UCSD

- <http://wic.ucsd.edu/>



Soft Circuits

- Come get supplies:
 - Battery holder + batter
 - LEDs
 - Conductive thread
 - needle

- Tools to share: needle nose pliers, scissors

Sewing!

