



## CENTER FOR TEXTUAL STUDIES AND DIGITAL HUMANITIES

# Introduction to Digital Humanities Research & Computing

Fall Semester 2015

Week 1

## Course Schedule

- No class on Friday 4th September 2015
  - Labor Day
- No class on Friday 9th October 2015
  - (DEV & Research week)
- No class on Friday 27th November 2015
  - Thanksgiving break
- Last class on Friday 4th December 2015
- Final assessment due on Friday 11th December 2015

## Course Details

- Instructor: Dr Nick Hayward
- Email: [nhayward@luc.edu](mailto:nhayward@luc.edu) or [ancientlives@gmail.com](mailto:ancientlives@gmail.com)
- Office: Lewis Towers 531 (WTC) & Loyola Hall 316 (LSC)
- Office hours: Thursday @ WTC or Friday @ LSC by appointment

# Current Posts

## Teaching etc

- Lecturer & Senior Research Fellow, Department of Computer Science, Loyola University Chicago, USA
- Lecturer, CTSDH...

## Research

- Editor & Technical Director, NEH funded 'To the Lighthouse by Virginia Woolf' project, Center for Textual Studies and Digital Humanities, Loyola University, Chicago, USA
- Honorary Senior Research Fellow, School of English, De Montfort University, Leicester, UK (Technical Development Officer for 'Modernist Magazines Project', and 'Elizabeth Jennings Project')
- Visiting Scholar, Emerging Technologies Laboratory, Loyola University, Chicago, USA
- Consultant and Programmer, NEH funded 'HRIT - CaTT' project, Center for Textual Studies and Digital Humanities, Loyola University, Chicago, USA
- Consultant, HUMI funded 'Early Illustrated Books' project, Keio University, Tokyo, Japan
- Technical Development Officer, HUMI funded 'Malory Project', Keio University, Tokyo, Japan
- Consultant, ADFA, Canberra, Australia.

## Intro

- Education: Ancient History & Archaeology, Cuneiform & Near Eastern Studies, and Computer Science
- Research: Publication systems, textual markup, digital editing, image manipulation, cloud services, and mobile development...
- Projects: Metrics Project, Verne Digital Corpus, Woolf Online, Malory's 'Morte Darthur', Modernist Magazines, Elizabeth Jennings, Working Class Lit, Early Illustrated Books, HRIT...
- Societies: BAMS, CWWN, AAS, STS, ESTS...

## Class Intros

### **Your turn!**

- Academic background
- Any and all experience possibly relevant to digital humanities
- Any computer experience
- Why digital humanities?
- What do you hope to achieve from the course?

## Goals of the course

- introduce the many different aspects of digital humanities (media and data, manipulation, digitisation, preservation, exploration, visualisation...)
- create awareness of the digital humanities community, and its work to date
- explore project development and maintenance
- application of computing and computer science in academic research, publishing, libraries, and the arts
- consider history of programming and its implementation
- explore theory of programming and its practical application
- procedures, analysis, and problem solving

# Course Assessment

## Ongoing

- ongoing weekly assessment work (20%)
  - discussions
  - exercises
- class presentations (20%)

## Final

- conceptual project design (30%)
- conceptual design specification (30%)



# Assessment

ongoing weekly assessment work (20%) - part 1

## Discussions

- hosted on Google Groups
- moderated by myself
- private group for class members and CTSDH faculty
- weekly discussion topic posted each Wednesday after a Tuesday class

# Assessment

ongoing weekly assessment work (20%) - part 2

## Exercises

- exercises to test material discussed in class
- basic design and coding work
- practical tests of material discussed in class
- assessed primarily on success of programmatic solutions, but also structure, comments, documentation...

## Assessment

class presentations (20%)

- scheduled for various intervals during the course
- short 10 minute presentations on pre-defined material
- conference style presentations and papers

# Assessment

conceptual project design (30%)

- choose your own preferred material, text, work (you'll need to be able to justify your selection to the group as part of your presentation)
- [NEH Grants](#) style proposal (eg: [Startup Grants](#), Digital Editions...)
- helps visualise project management and development
- beneficial for future development and preparation of grant proposals
- does NOT require actual project development, simply conceptual planning and design
- proposal submitted as Final Assessment at end of semester

# Assessment

conceptual design specification (30%)

- software design specification
  - act as Technical appendix to conceptual project design
- complementary to conceptual project design

## Sample Outline

NEH funded 'To the Lighthouse by Virginia Woolf'

- if necessary, additional proposal samples will be available

## Course website and resources

- course information
- weekly updates
- assignments and weekly work
- latest news
- job listings
- resources and bibliography
- links to discussion groups, blogs, journals
- conferences

Any questions?



What is Digital Humanities?

"Humanities computing is precisely the automation of every possible analysis of human expression (therefore, it is exquisitely a 'humanistic' activity), in the widest sense of the word from music to the theatre, from design and painting to phonetics, but whose nucleus remains the discourse of written texts."

Roberto A. Busa (A Companion to Digital Humanities, 2004)

## Digital Humanities

- Computing in the humanities, humanities computing

"Often perceived as originally 'textually focused computing in the humanities'"

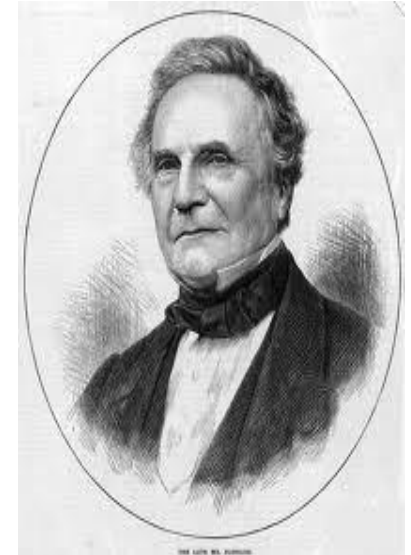
Susan Hockey (A Companion to Digital Humanities, 2004)

And now for something completely different...



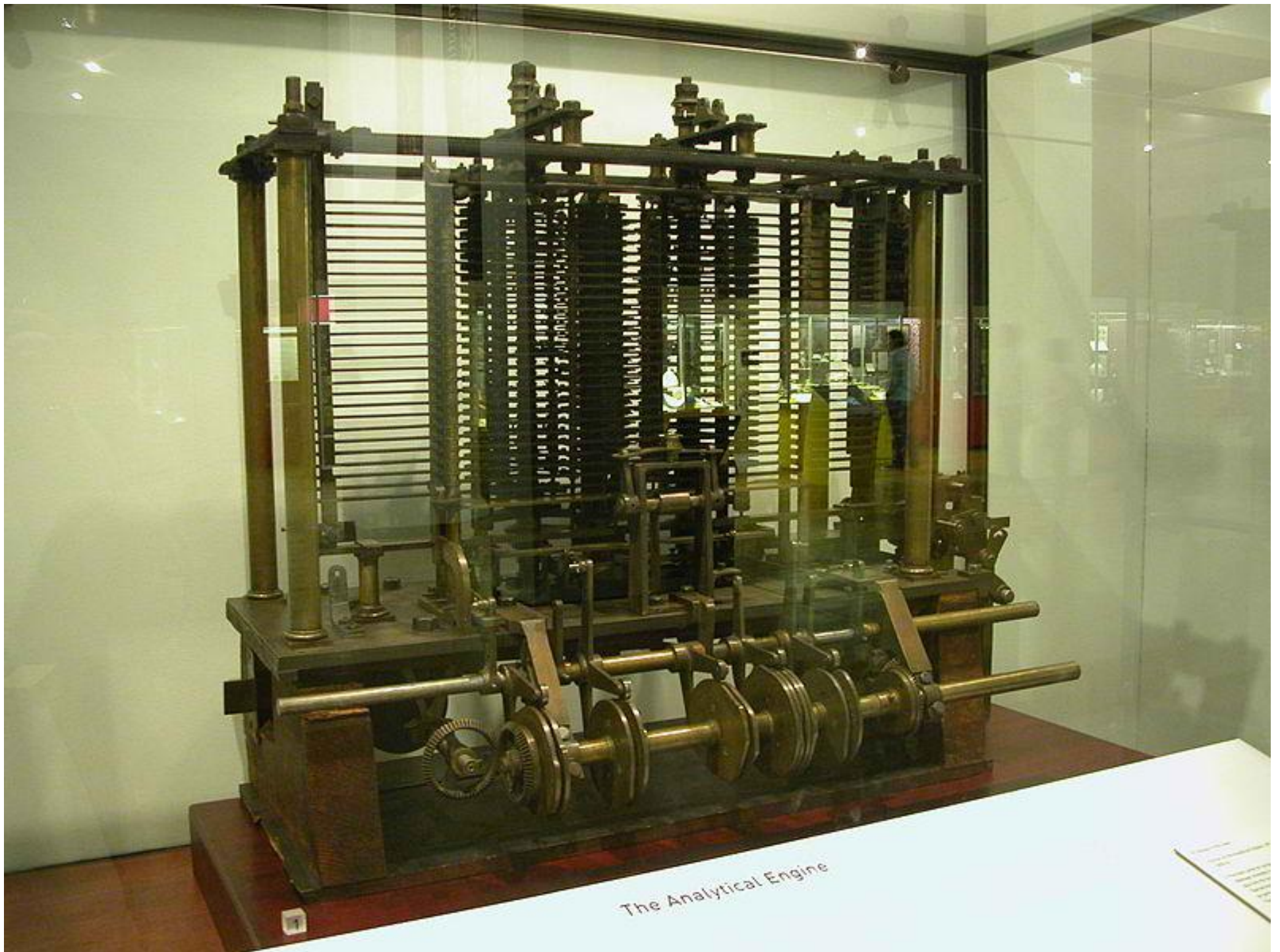
# First computer and programming

1834 - Charles Babbage's 'Analytical Engine'



1842 - Ada Lovelace writes the first computer program

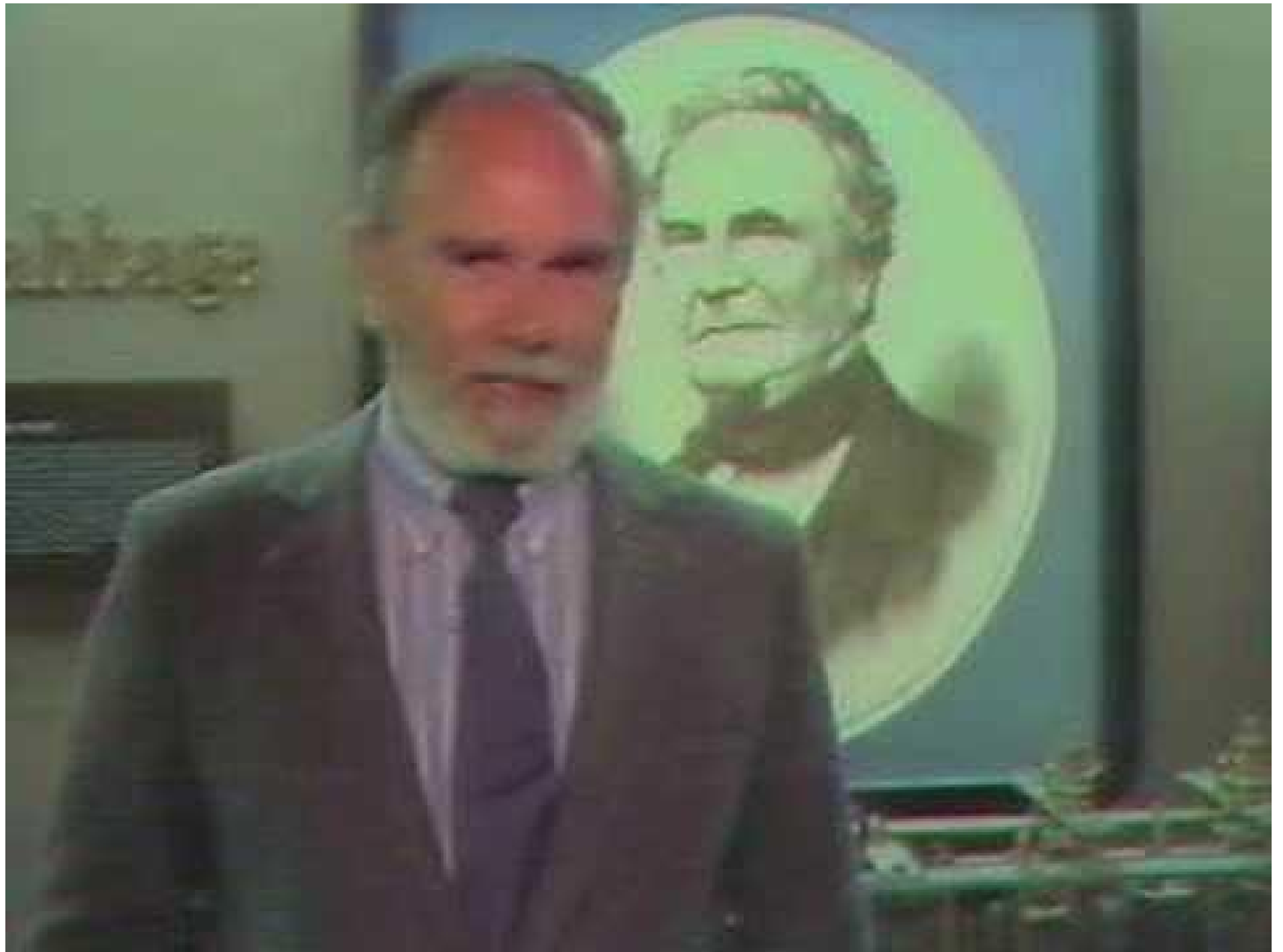






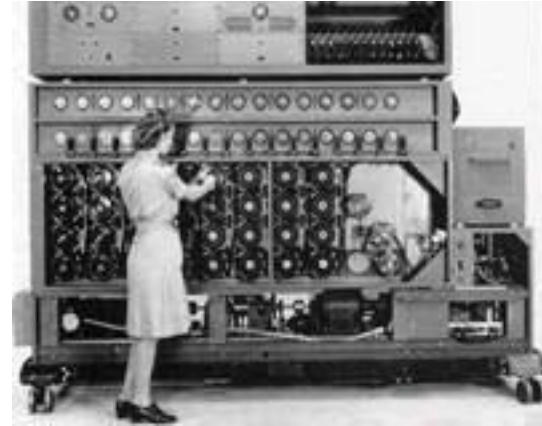






## WWII & Code Breaking

1941 - the first 'Bombe' is completed



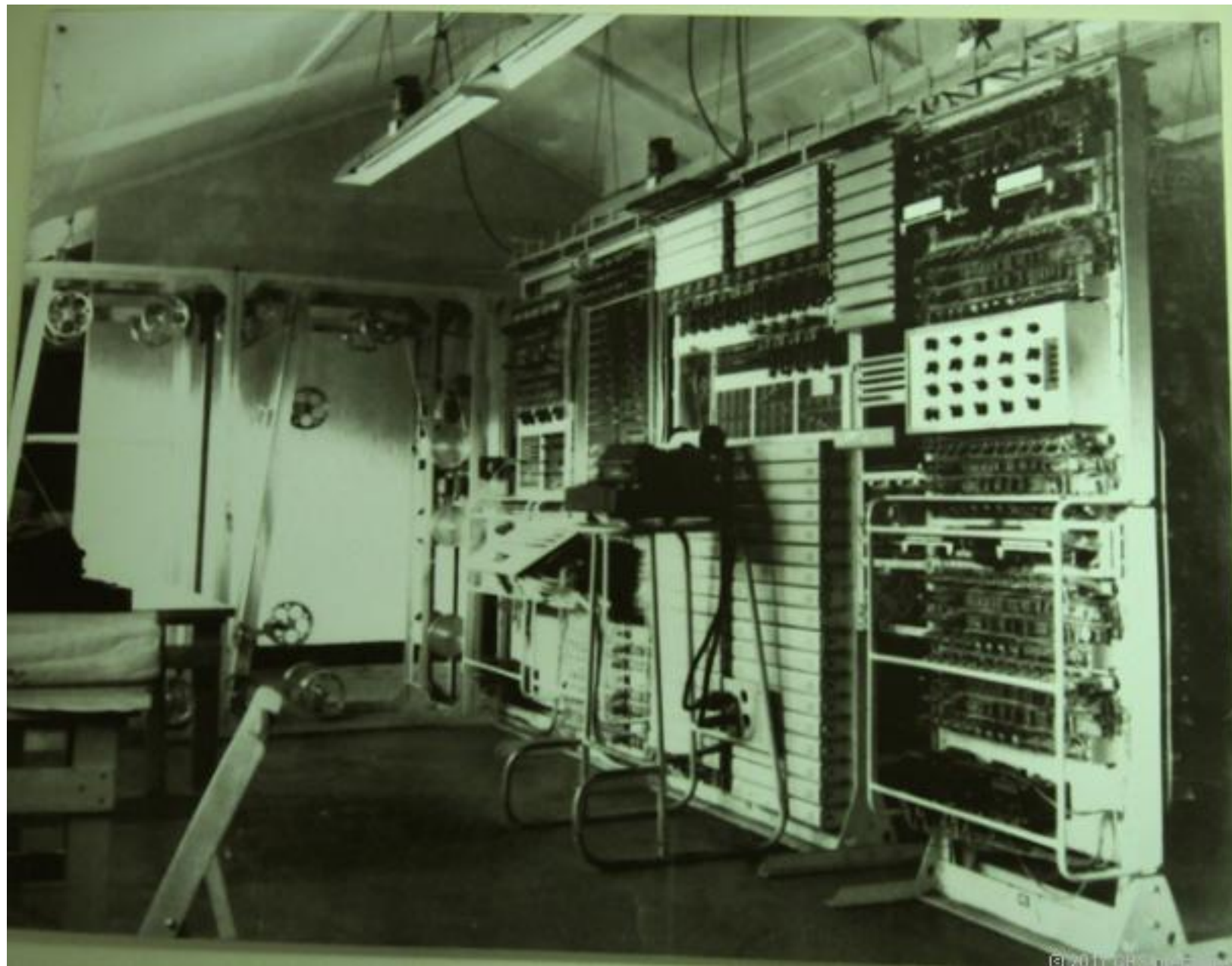
1942 - the Atanasoff-Berry machine built at Iowa State college

1944 - Colossus at Bletchley Park & the Enigma & Lorenz ciphers

1945 - John von Neumann wrote 'First Draft of a Report on the EDVAC'

1946 - ENIAC announced to the public





## WWII & Code Breaking

- [BBC article](#) on Colossus code breaking of German signals

# Computing

## True or false?

- The majority of today's, and tomorrow's, most exciting and important arts, sciences, and technologies are driven by computing.
- A better understanding of computing helps illuminate insights and questions into the very nature of our minds, our culture, and our universe.

# Processes

- what are processes?
- what are processes in the real world?
- computer science is often described as the study of **information processes**
- why abstract and not real/physical?