Social Networks

Lecture #1

Administrivia:

Social Networks X
CSCI-GA 3033-004.

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Class hrs: Tuesdays 7:00-9:00 pm EST.
Class Room: Room 101; CIWW (251 Mercer St.)

Text Book: Easley & Kleinberg (EK)
"Networks, Crowds and Markets: Reasoning about a Highly Connected World"
Introduction

Syllabus (to be determined)
Exploring connections to

Game Theory
  → Signaling Games
  → Privacy, Anonymization and Distributed Computing
    → Virtualization; Graph Th.

Economics
  → Payment Systems,
    Auction,
    Cryptocoins.

Statistical Inference
  → Data Science,
    Machine Learning
    Graph Theory/Linear Algebra

Applications:
  → Healthcare
  → Finance
  → Advertisement
  → Data Markets
Entrepreneurship

Job creation → Social Goods
Venture Capitalism → Market liquidity
Startups → Technological Innovation
Accelerators/Incubators → Education
Hardware/Platforms → Infrastructure.

A brief discussion on
"The Innovators"
Walker Isaacson.

History
1) Origin of Computing:
   ◦ Jevons, Leibnitz, Boole, Babbage
      → Ada Lovelace
   ◦ Vannevar Bush → Memex
      Norbert Weiner, Claude Shannon
      John von Neumann.
   ◦ Alan Turing
      Alonzo Church, Steven Kleene
      John von Neumann.
   ◦ & Howard Aiken
      Mauchly, Atanasoff
      Eckert
2) Origin of Digital Computing
   - Konrad Zuse (23) Electromechanical
     - Atanasoff → Mauchly, Eckert
     - Turing → Colossus
     - ENIAC, EDVAC, ...

3) Origin of Programming
   - Grace Hopper → Compiler
     - Jean Jennings, Frances Bilas
     - Frances Holberton, Kay McNulty
     - Frances Spence Jean Bouchik

4) Origin of Integrated Circuit (Transistor)
   - Bardeen, Brattain, Shockley
   - Robert Noyce & the Traitorous Eight
   - Gordon Moore & Moore's Law
   - Silicon Valley
   - Jack Kilby

5) Origin of DARPA Net
   - J.C.R. Licklider
   - Doug Engelbart
   - Paul Baran - Packet Switching
   - Taylor & Robert ARPANET
   - Cerf & Kahn - TCP/IP
6) Origin of Augmented Intelligence
   • Alan Kay - Alto SmallTalk
   • Jobs & Gates - Windows/MacIntosh
   • Berners-Lee, Andreesen
     - WWW, Mosaic
   • Page, Bryn - Google

7) Origin of Online Community
   • Brand, Brilliant - The Well
   • Steve Case - AOL
   • Justin Hall - Web log - Blog
   • Ward Cunningham - Wiki Wiki
   • Jimmy Wells - Wikipedia

WHAT NEXT?

• Deception
• Privacy
• Economy