Computer Science 301 – Computers and Society

Prof. Rosenthal

Essay 1. Significance of a Key Person in Computer Science

You are to write a report on one of the computer scientists/mathematicians listed below. If you wish to select a different person from one of those on the list let me know, and I will tell you if the person is acceptable. Please have your selection ready on Tuesday, January 29, so I can ensure a balance in the write-ups.

This essay is not a typical biography, although you can have a brief introduction as to when and where the person was born, etc. The purpose of this essay is to define and explain the **contributions/discoveries/inventions** that this person made, why they are important, and how the impacted mathematics and or computing. If there are ethical implications and/or unanticipated consequences in their work discuss those as well. Understanding and explaining the ideas and why they matter is most important. You can also talk about what happened to the person and his invention if the story is interesting.

Remember: Start with an outline and gather your facts before you begin writing.

List of Scientists/Inventors

1. Charles Babbage
2. Barry Boehm
3. Grady Booch
4. George Boole
5. Sergey Brin
6. Kimberly Bryant
7. Safra Catz
8. Katherine Johnson (from Hidden Figures)
9. Peter Denning
10. Edsger W. Dijkstra
11. Larry Ellison
12. Kurt Godel
13. James Gosling
14. Margaret Hamilton
15. Brian Kernighan
16. Leonard Kleinrock
17. Donald Knuth
18. Ray Kurzweil
19. Tim Berners-Lee
20. Elon Musk
21. John Von Neumann
22. Adi Shamir
23. William Shockley
24. Alan Turing
25. Meg Whitman
26. Jeannette Wing
27. Mark Zuckerberg

Ground Rules for Format:

Format: Microsoft Word

Spacing: 1.5 lines

Font: 12 point Times New Roman

Margins: 1" top and bottom, 1.25" left and right

Header: Name in upper right corner

Footer: Page number in center.

Length: Minimum 6 pages. One page of the 6 may be figures. One of the pages should be your bibliography. Paper can be longer, but there must be at least the equivalent of 4 typed pages in the actual essay.

At least three references – they may be from the web, or actual books.

Submittal via e-mail: csc301csudh@gmail.com

Ground Rules for Grading:

Final Paper:
Introduction (10 points)
 • Background information – explains context of person's work
 • Thesis statement – well written and previews paper
Body (55 points)
 • What was the problem that the person was trying to solve?
 • What was the person's invention/contribution to science?
 • Why was it important – where would we be without it?
 • Were there any social impacts as a result of the work? Describe and discuss.
 • Did the work create any ethical issues? If so, discuss at least a few of them.
 • What's happened since? Has it led to new inventions?
Conclusion (10 points)

Writing:
 • Logical flow and smooth transitions – a readable paper (10 points)
 • Grammar and Spelling (5 points)
 • Citations (10 points)
   o Complete in text citations
   o Complete bibliography
   o You can use the site http://www.bibme.org to prepare your bibliography. This tool is MLA compliant. Any other tool is equally acceptable.