Recollections of Stanford CS 1969--1973

Ronald L. Rivest
Bob Floyd

ALGOL W (REVISED)

LANGUAGE DESCRIPTION pp. 1 to 65
ERROR MESSAGES pp. 66 to 75
NUMBER REPRESENTATION pp. 76 to 89
DECK SET-UP pp. 90 to 91
GRAMMATICAL DESCRIPTION pp. 92 to 103

COMPUTER SCIENCE DEPARTMENT
STANFORD UNIVERSITY
SEPTEMBER 1969

Algorithms
Programming; Algol W
Advice...
Time Bounds for Selection*

Manuel Blum, Robert W. Floyd, Vaughan Pratt, Ronald L. Rivest, and Robert E. Tarjan

\[ P(n) \leq \frac{66n}{21} + P\left(\frac{n}{21}\right) + n + P\left(\frac{31n}{42}\right) \]
Donald E. Knuth

Optimal binary search trees

O-notation

The Art of Computer Programming...

Bibliography on Sorting joint paper

Phyllis Winkler
Knuth’s Seminar

NP-Completeness; Traveling Salesman Problem

Dick Karp       Ron Graham
David Klarner

Polyominoes

Wooden puzzles

$(3)1 \times 1 \times 3 + (29)1 \times 2 \times 2$

or $25 \ Y's$ into $5 \times 5 \times 5$ cube
Vasek Chvatal

Combinatorics
Perfect Graph Conjecture
Linear Programming
Mexico
Other CS faculty...

- Zohar Manna
- John McCarthy
- John Herriott
- Jerry Feldman
- Gene Golub
- Ed Feigenbaum
- George Forsythe
Computing

• Punch cards...
• Wylbur...
• SAIL...

Operating Systems B. Randell
Editor

WYLBUR: An Interactive Text Editing and Remote Job Entry System

Roger Fajman and John Borgelt
Stanford University Computation Center
Fellow students...

• Vaughan Pratt
• Leo Guibas
• Bob Tarjan
• Dick Sites
• Doug Brotz
• Mike Fredman
• Giles Kahn
• Jean Vuillemin
• Malcolm Newey
• Denny Brown
• Barbara Ryder
• ...
SAIL Cart Project

• Bruce Baumgart
• “Find the road”
• PDP-10 assembler
• midnight hours…
• (draft deferment; for a while…)
Teaching

• TA positions
• Summer Algol W course
  - Notes from Bob Floyd
  - Special TV room
California
Gail
Thesis

Privacy concerns... (shades of Google!)
Economics

- $300/month NSF Fellowship
- $125/month rent in Escodido Village
- Gas was 28 cents/gallon
- Food stamps (!)
Politics

• Unpopular war...
• Unpopular president...
• The draft...
• George McGovern 1972 election
• “Computer security”...
Then on to...

• France
• MIT
• RSA
• Kids
• Textbook...
Thanks!