TCF@50

TCF1976 - TCF2015

THIS SESSION WILL LOOK AT THE HISTORY OF TCF

HOW IT BEGAN

WHERE IT IS GOING

& WHAT TCF@50 MIGHT BE LIKE?

INTERNATIONAL
Herald Tribune
Published with The New York Times and The Washington Post

PARIS, FRIDAY, MAY 7, 1976

Page 5

The Hottest New Toy

Putting Computers in the Home

By Boyce Rensberger

TRENTON, N.J. (NYT).—The computer, once an awesome, mysterious and incredibly expensive machine of superhuman powers, has become the hottest new toy of electronics hobbyists, some of whom predict that within a few years computers will be commonplace in American homes.

Retail computer stores—the Hoboken Computer Works, for one—are springing up around the country. Several computer hobbyist magazines have begun publishing. And last weekend the new movement held its first convention—the Trenton Computer Festival, which drew an estimated 1,500 men, women and children to lectures, commercial exhibits and an outdoor computer flea market.

"We're on the doorstep of a brand new thing," said Bol Libes, a festival organizer who is president of the Amateur Computer Group of New Jersey. "Until a year or so ago, there weren't more than a hundred or so people who had computers in their homes. Now we estimate there are around 5,000. And it's growing."

The upsurge in amateur computer hobbyism is the direct result of the sudden and dramatic decline in the price of a new device, called a microprocessor, which, in effect, is an ultraminiaturized computer.

Size

A single microprocessor, the size of a half a stick of gum, can contain 3,000 transistors along with other components that are the equivalent of a room-size computer of 10 years ago.

A decade ago a computer of this capability cost several hundred thousand dollars. Today, using the mass-produced microprocessor, one can be had for $266. For $1,000 a hobbyist can now have a computer far surpassing the best that International Business Machines or Sperry Rand had to offer barely a decade ago.

Four years ago a typical microprocessor cost $400. Today the best-selling one retails for around $15. A typical hobbyist's computer has one or more microprocessors, a keyboard for entering instructions, a memory unit, and a television set for displaying the answers in number, word, chart or picture form.

With all this computing power at their fingertips, how are amateur computerists, as some like to be called, using their machines?

Demonstrations abounded in the festival's exhibition halls on the Trenton State College campus. A color television set, displaying computer graphics, depicted a gin bottle endlessly pouring martinis. Another screen, challenging passersby to a game of blackjack, asked first, "Wager?" It also said, "Anytime you want, me to reshuffle the cards, type 7777."

Practicality

But what about practical uses?

"Well," said Claude Kagan, a researcher at Western Electric, "you could tell who was ringing your doorbell. You could weigh all the people you know and put in their heights and diameters and the computer, with photocells, could tell you whether a stranger was at the door."

Other uses, Mr. Kagan suggested, would be to have the computer operate, by remote control, a vacuum cleaner or a lawn mower. The layout of the living room or yard would, of course, be part of the program.

"Actually," said Steve Stallings, an editor of the Computer Hobbyist, "most of us are into computers because they're fun. The really practical applications at this stage are not too great. I think most of us say, 'Hey, that's a nice playboy. What can I say that would justify it?'"

Although some computer enthusiasts say home devices could be used to keep one's household budget in order, file information and prepare tax returns, most say it has great potential as an entertainment and educational medium.

For example, it is already possible to buy ready-made programs that will set up any general purpose computer to play such simulation games as Nato-Strategies, involving rat control in an urban area can be explored. Factors involving sanitation, pesticides, rat immigration and emigration are included.

Some computer hobbyists predict that in the next few years many other such programs, offering new kinds of games, educational courses and artistic media, will be available. They foresee a time when a cheap computer linked to the television set and an electric typewriter will allow any family to make use of such programs in the home.

"I'm not saying computers are for everyone," Mr. Libes said. "But it's clear that more and more people are getting into this."

HOBOKEN COMPUTER WORKS

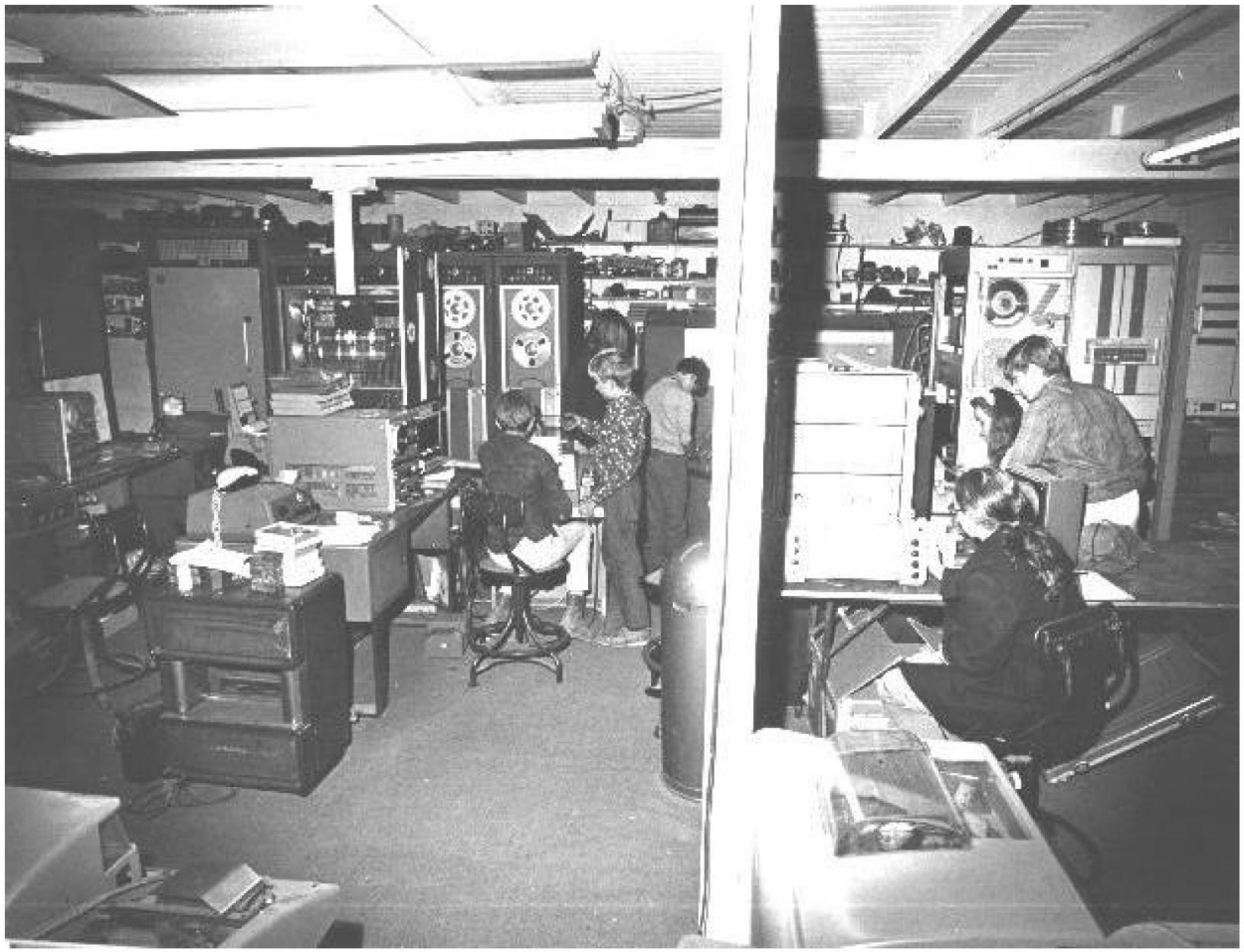
COME IN AND TALK WITH BOB RADCLIFFE YOU WILL BE AMAZED AT WHAT WE HAVE

OUTLINE

- HOW TCF ORIGINATED
- BIRTH OF PC & ACGNJ
- THE 1ST TCF AT TSC (NOW TCNJ)
- 1ST KEYNOTE SPEAKER
- SOME OF THE MEMORABLE TCFs
- MOVE TO MCCC, THEN TO NJ EXPO CENTER
- KGP & MARKETPRO MANAGEMENT
- BACK TO TCNJ
- PRESENT PROBLEMS
- FUTURE POSSIBILITIES
- TCF@50 & FUTURE OF COMPUTING

GENESIS - COMPLEX

CLAUD KAGAN'S RESISTORS 1965



1965 – Claude Kagan's Datapoint vacuum tube computer in the basement of his barn. Hopewell, New Jersey high school students worked on it.

GENESIS

SOL LIBES BUILD 8008 MICROPROCESSOR BASED COMPUTER

1973 – Sol Libes & Students build Intel 8008 microprocessor-based computer using parts from obsolete computer

GENESIS

ROGER AMIDON (K2SMN)
RTTY ENTHUSIAST
DREAMS OF A COMPUTER

~ 1974

GENESIS

MITS ANNOUNCES ALTAIR 8800 KIT
256 BYTES OF MEMORY

JAN 1975

GENESIS

SOL LIBES FORM ACGNJ – 1ST INCORPORATED PC CLUB

-- Dr. Allen Katz, Prof. E/CE TCNJ President, Linearizer Technology, Inc. <http://www.lintech.com> Tel 609-584-8424, Cell 609-947-3889

GENESIS

- **AL KATZ -1ST EME WAC** **1976**
- **GETS INTERESTED IN MICROPROCESSORS**
- **REALIZES IMPACT & STARTS TEACHING ASSEMBLY LANGUAGE**
- **JOINS ACGNJ**

GENESIS

FALL 1975

SOL LIBES WITH ACGNJ

&

AL AT TSC (NEW ENGR PRGM)

NEED VISIBILITY & WANT TO PROVIDE SERVICE

JOIN FORCES TO PRODUCE

FIRST COMPUTER FESTIVAL

(ROGER SAYS TCF WAS HIS ORIGINAL IDEA)

GENESIS

1976

ACGNJ BOARD OF DIRECTORS

- PRES: SOL LIBES
- VP: MARTIN NICHOLS
- REC SEC: PIERCE CAPELL
- C0RR SEC: EDWARD EIBLING
- TREAS: KEVIN REDDEN
- DIR: TOM KIRK
- DIR: WILLIAM KLOTZ
- DIR: ALLEN KATZ
- DIR: ARTHUR FOWLER
- DIR: ROGER AMIDON
- DIR: DOUGIAS L. MOSER

RESULT

TCF'76

APRIL

ARMSTRONG HALL

> 1000 ATTENDED

GREAT MEDIA ATTENTION

TCF76 –FRONT PAGE NY TIMES

Low-Cost Computers Beginning to Move Into the Home

By BOYCE RENSBERGER
Special to The New York Times

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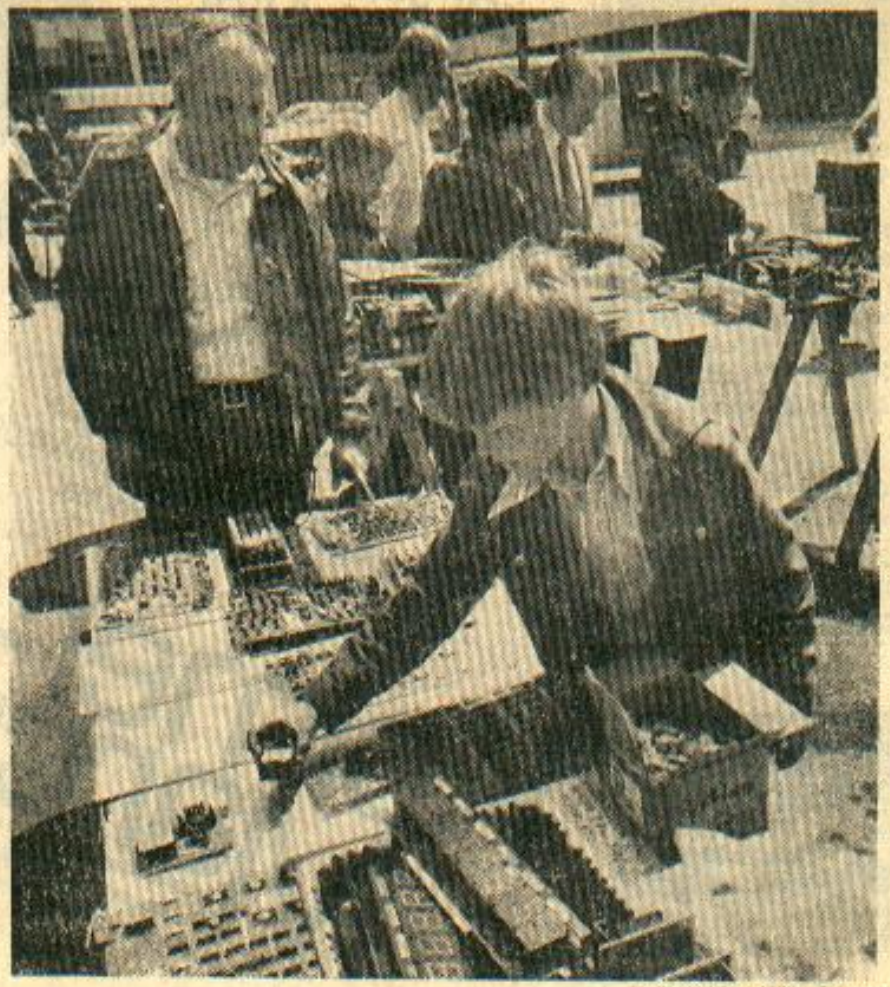


The New York Times/William E. Sauro

Electronics hobbyists looking over offerings at Trenton Computer Festival on Sunday

Photo by Marj -- Copyright 1976, 2000 by Marj Kirk

cramer

Photo by Marj -- Copyright 1976, 2000 by Marj

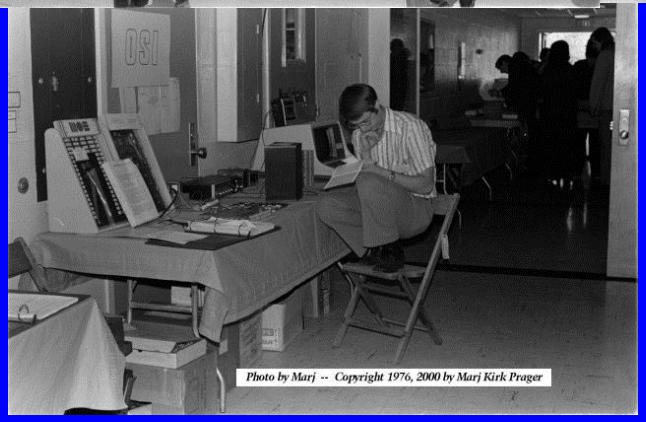
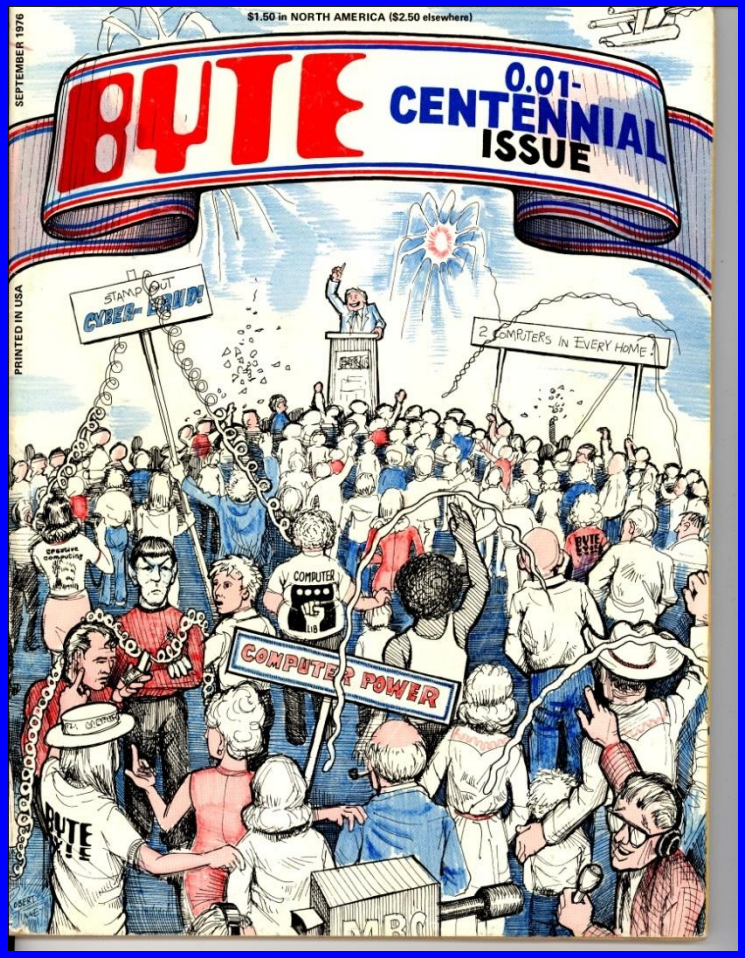
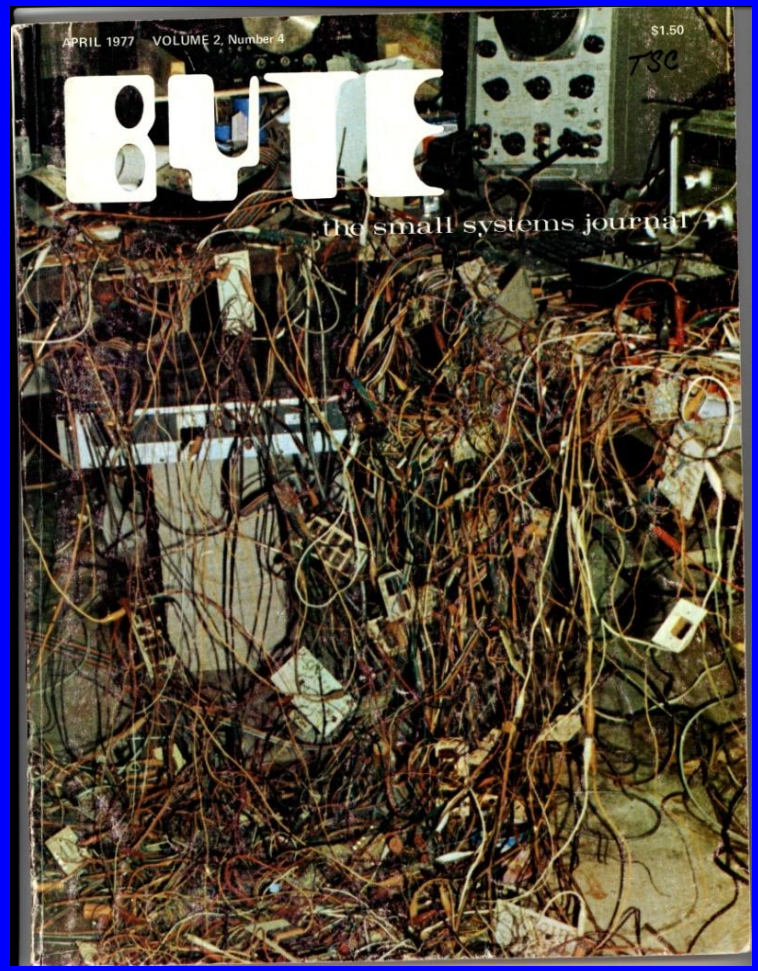


Photo by Marj -- Copyright 1976, 2000 by Marj Kirk Prager

TCF'76

BYTE & KILOBYTE MAGAZINES





OTHER COMPUTER FESTIVALES

TCF'77 – MORE THAN DOUBLED IN SIZE

FIRST KEYNOTE SPEAKER

MR. AND MRS. JOHN W. MAUCHLY

INVENTOR OF THE FIRST DIGITAL COMPUTER

THE CIRCUMSTANCES SURROUNDING THE INVENTION OF THE FIRST DIGITAL COMPUTER

1978 David Ahl, Publisher Creative Computing Magazine

1979 Wayne Green, Publisher of Kilobaud Magazine,

1980 Carl Helmers, Executive Editor of BYTE Magazine

1981 Dr. Adam Osborne, Author & 1st Portable Computer

1982 Dr. Gary Kildall, Creator of CP/M

1983 Dr. Ken Iverson, IBM, Creator of APL

1984 Steve Ciarcia, Ciarcia's Circuit Cellar

1985 Seymour Rubinstein, Originator of Word Star.

1986 Philip Lemmons, Editor of BYTE Magazine

1987 Claudia Choi, Editor Family Computing Magazine

1988 Chris Rukowski, Founder and CEO Rising Star Inc.

TCF'89 BILL GATES, CEO MICROSOFT

IN ROOM BSC 202

LAST TIME TCF AT TCNJ UNTIL 2005

10 YEARS AT MCCC & 5 NJCS

1990 TO 1999 TCF WAS AT MCCC

TCF WAS KICKED OUT OF TCNJ BY EWING TOWNSHIP

- **David House,** Senior VP Intel Corp. "Advances in Microcomputers“
- **Gordon E. Eubanks,** CEO Symantec Corporation, "The Future of Personal Computing“,
- **Bjarne Stroustrup, Developer** C++
- **Phil Zimmerman, Creator PGP –** Cryptography
- **Dennis Hayes,** “The Future of High Speed Internet Communications"
- **Eric Raymond,** "Open Source Software Movement"

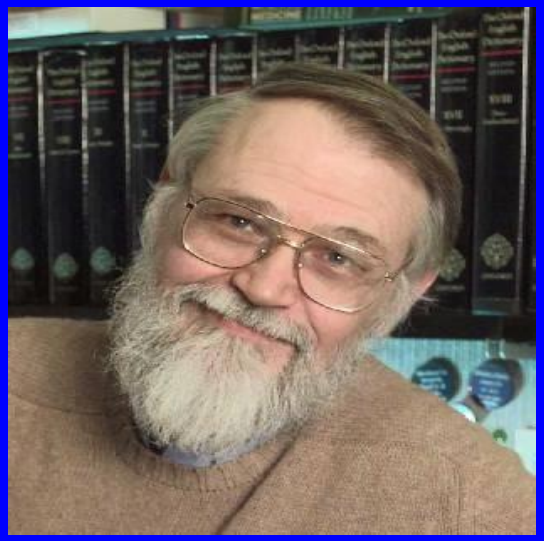
2000 TO 2004 TCF WAS AT NJ CONVENTION CENTER

MANAGED BY KGP

KEN OFFERED A DEAL WE COULD NOT REFUSE

Emmanuel Goldstein, Ari Kaplan & Rebecca Mercuri

IN 2005 TCF RETURNS TO TCNJ STILL MANAGED BY KGP



Dr. Brian Kernighan was Keynote

After TCF 2005 Ken Gordon Retires

Search for New Manager

TCF ITPC ADDED ON FRIDAY

2006 GREGORY OLSEN, 3RD PRIVATE CITIZEN TO ORBIT THE EARTH IS TCF KEYNOTE

MarketPro Takes Over Management 2006, 2007, 2008

IN 2009 MARKETPRO SEVERS RELATIONSHIP WITH TCF AND RUNS OWN SHOW IN COMPETITION

IEEE REGION I STUDENT CONFERENCE AT TCF

TCF TEAM TAKES OVER MANAGEMENT OF VENDORS & SHOW FOR 1ST TIME IN 10 YEARS

CESOP DROPS OUT AS TCF SPONSOR

BRING DVRA TO HELP WITH REG.

IN 2010 MOVE TALKS TO SSB
DVRA RUNS NJ HAM CONVENTION
MAVHFS RUNS FLEA MARKET

HOST FIRST STEM EVENT TO BECOME ISEC

IN 2011 MOVE VENDORS TO GYM FINANCIAL DISASTER

TCF TALKS & NJ HAM CONVENTION VERY SUCCESSFUL

KEEPING TCF ALIVE - RESPONSE

2011 MANY SPONSORING CLUBS LEFT TCF

- **TCF CORP DISBANDED –** TCNJ TOOK ON $ RISK
- DOWNSIZED TCF TO ONE DAY + ITPC & ISEC PROFESSIONAL CONFERENCES
- HAD TO ELIMINATE POSTAL MAILING
- MOVED EARIER IN YEAR TO GET FAVORABLE ROOM RATE
- MOVED VENDORS FLEA MARKET INDOORS

IN 2012 AND 2013

- TCF WAS IN ARMSTRONG HALL AND PHYSICS BUILDING
- HAD MODEST GROWTH FROM 600 TO 800 ATTENDANCE

IN 2014 MOVE TO EDUCATION BUILDING

- **BETTER PARKING**
- **MORE SPACE AND CONSOLIDATED**

FUTURE – BRIGHTER

(NEW ENGINEERING BUILDING COMING)

IN 2014

- ED BUILDING BEST TO DATE
- HAD MODEST GROWTH
  ~ 900 ATTENDANCE

- **IN NEAR FUTURE WIL STAY IN ED BUILDING**

NEW ENGINEERING BUILDING UNDER CONSTRUCTION

THIS YEAR 40TH TCF (2015)

- **INVITE ATTENDEES FROM TCF@1**
- **INVITE BACK PAST TCF KEYNOTE SPEAKERS**
- **HAVE RECEPTION FOR PC PIONEERS**

NOW LOOKING FOR IDEAS

TCF@50

FUTURE TRENDS FOR TCF@50

- BIOLOGY & COMPUTING?
- PARALLEL SYSTEMS – SETI@HOME

- MEMS (MICRO ELECTRONIC) MECHANICAL SYSTEMS) COMBINED WITH COMPUTERS

COMPUTERS THAT "THINK"

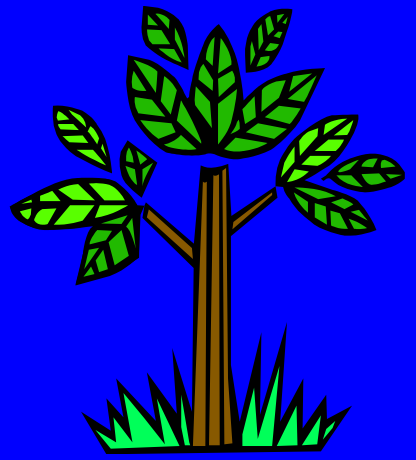
COMPUTER BASED LIFE --

JEFF HAWKINGS - *ON INTELLIGENCE*

REPRODUCTION ≠ GAGE OF LIFE

CONSCIOUS IS KEY

COMPUTER LIFE FORMS WILL NOT WANT TO TALK WITH US!



CONCLUSION

- THE NEXT 500 YEARS WILL BE VERY DIFFERENT FROM THE PAST 500 YEARS.
- **TCF@50 BRING BIG SURPRIZES!**
- WILL BE MORE COMPUTERS THAN PEOPLE.
- COMPUTERS COULD BE THE DOMINANT SPECIES….. WILL WE CARE?