

# Kenneth A. Pickar

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## EMPLOYMENT

**Visiting Professor of Mechanical Engineering (1998-present),  
J. Stanley Johnson Professor (1999-2003)**

**California Institute of Technology, Pasadena, CA**

Teaching courses in Entrepreneurship, Management of Technology, Product Design for the Developing World. Coaching start-up Ventures; Presidents Advisory Board for JPL, Co-PI of NSF-funded Entrepreneurial Postgraduate Fellowship Program

2005 Award for Excellence in Teaching by Undergraduate Students of Caltech

### **Corporate Positions**

Board of Directors, Level One Corporation (1997-1999) (was on NASDAQ, later sold to Intel in 1999).

Board of Directors, Neustar Corporation (2000- ). IPO NYSE in June 2005.

Board of Directors, H2Scan Corporation (2005- )

Operating Committee, Idealab (2004- )

### **(1999-present) Tech Coast Angels (LA)**

Made 10 early stage investments through Southern California Network, Executive Committee (2001- )

### **UCLA Anderson School of Business**

Visiting Lecturer, Global Access Program (2005- )

### **1993-1998 - Senior Vice President, Engineering and Technology AlliedSignal Aerospace, Torrance, CA (now Honeywell)**

Chief Technical Officer for the \$6B Aerospace Sector of AlliedSignal. Chairman, Corporate Technology Board of \$15B parent company. Responsible for the new product development process, Corporate R&D Laboratories, technology development in businesses, program management, and university relations. Budget of \$300M and leadership of 8000 engineers in Aerospace.

**Accomplishments:** *Sector average earnings growth of 15% year. Drove modern product development processes including program management to produce many new products. These include new turbogenerator business for the industrial market, more reliable engines with 50,000 new Ceramics components now flying; Enhanced Ground Proximity Warning Systems to greatly improve air safety.*

### **1983-1992 - Manager-Electronic Systems Research Ctr. General Electric Corporate Research and Development, Schenectady, New York**

Corporate Manager for Electronics Technologies including VLSI, displays, power devices, circuits, drives, controls, high density packaging, optical electronics, enhanced definition TV, signal processing. Technologies applied to, semiconductor, medical imaging, aerospace, lighting, aircraft engine, motors, transportation, communications, and others. Manager of a staff of 350 people in four laboratories including 100 PhDs. Budget of \$60M comprises 30% of Corporate R&D, includes \$15M Government contracts.

**Accomplishments:** *MRI and Ultrasound now multi-billion GE businesses. Complete revitalization of \$2.0B Electronic Distribution due in part to R&D innovation. Genius I/O industrial automation product accounts for 20% of GE Fanuc sales (leveraging an additional 30%), Halogen IR lamp introduced by GE Lighting with 30% efficiency improvement.*

**1982-1983 - Senior Partner**

**Thomas Consulting Group, San Jose, California**

Consulted for the Semiconductor Research Corporation at its inception. Also advised in electronics technology and manufacture for a wide variety of systems and components companies.

**Accomplishments:** *Product development cycle times at several clients reduced by greater than 50%.*

**1978-1982 - Director-Advanced Technology Center**

**Signetics Corporation, Sunnyvale, California**

R&D for MOS and Bipolar silicon processing, packaging and factory computer automation. Technical liaison with parent company, Philips. Capital budget of \$25M to build and equip 120,000 sq. ft. R&D building. Headed group of 50 scientists and 25 technologists.

**Accomplishments:** *Provided the technology for Philips (Signetics) CMOS and bipolar processes to advance to 1 Micron and below.*

**1974-1978 -Manager-New Technologies Department Bell**

**Northern Research, Ottawa, Canada**

Technologies included electronic materials (II-VI and III-V) and thin Film devices to support exploratory subsystem research in display, printing, scanning and keyboards. Directed group of three managers with 20 PhDs and 10 technologists.

**Accomplishments:** *Changed focus of Laboratory from silicon technology to more coupled areas of parent company.*

**1972-1973 - Visiting Professor**

**Faculty of Electrical Engineering, Technion, Haifa, Israel**

Sabbatical leave from Bell Labs to teach, write and perform research.

**Accomplishments:** *Helped found a microelectronics Lab that had major technical and defense accomplishments in sensors.*

**1966-1974 - Technical Staff**

**Bell Laboratories, Murray Hill, New Jersey**

Researched thin film and silicon technologies, including ion implantation and electron beam lithography. Wrote Review Article on Beam Technologies

**Accomplishments:** *Helped develop ion implantation technology as a basic process for the semiconductor industry. Now universally used.*

**EDUCATION:**

Bronx High School of Science - 9/54-6/57 - Diploma

Queens College, City University of New York - 9/57-6/61 - BS, cum laude, Phi Beta Kappa, Physics and Math

University of Pennsylvania - 9/61-10/66 - MS, PhD – Physics

*Thesis: "Third Sound in Liquid Helium"*

**MANAGEMENT  
COURSES:**

Management of Research - Harvard Business School - 1978  
Financial Management for Non-Financial Managers - Wharton School -  
University of Pennsylvania - 1980  
GE Executive Development Course - Crotonville, NY - 1985  
Baldrige Examiner Training – 1997  
Six Sigma training 1995

**UNIVERSITY AND  
EDUCATIONAL  
RELATIONSHIPS:**

**Semiconductor Research Corporation,  
Board of Directors (1983-86) Vice-Chairman (1986)**

**Microelectronics and Computer Consortium, Board of  
Directors (1986-87)**

**Council on Competitiveness, Technical Advisory Committee,  
Washington, D.C. (1991-1992)**

**University of California, Berkeley (Extension) (1979-1983) course  
organizer and lecturer**

**Albany Medical Center, Trustee (1984-1992)**

**National Academy of Sciences/National Academy of  
Engineering- Academic Research Facilities Conference (1985)**

**IEEE Continuing Education Committee,  
Chairman, Advisory Board (1990-1992)**

**Various University Relation Positions;** AlliedSignal Campus Rep at Caltech  
(1993-1997); Cornell NSF Nanofabrication Center Advisory Committee  
(1984-1992); Stanford Center for Integrated Systems, Advisory Board  
(1984-1989); University of Illinois, Micro Center Advisory Board (1985-86)

**SPECIAL INTEREST**

**Board Of Directors (2005- ), LA Regional Food Bank**  
Feeds 400,000 people a week in LA County

**TECHNICAL**

Over 50 Technical publications invited and contributed talks on the subjects of Ion  
Implantation, plasma etching and electron beam lithography. Guest Editor  
Proceedings of the IEEE, Review Article “Advances in Solid State Science”

**PERSONAL**

Enjoy horticulture, hiking, skiing, biking, music and books. Married, three grown  
children.