

## **Curriculum Vita (CV): Professor Thomas H. Byers**

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### **Stanford University (1994 – present)**

2002-present. Professor (Teaching) *Department of Management Science and Engineering (MS&E)*.

Full professorship rank with continuing appointment and Stanford Academic Council membership and privileges. School of Engineering Endowed Chair in Entrepreneurship Education. Bass University Fellow in Undergraduate Education. Courses: Technology Entrepreneurship (Engineering 145); Leadership of Technology Ventures (Engineering 140 sequence); Entrepreneurial Management and Finance (MS&E 276); Entrepreneurial Thought Leader Seminar Series (MS&E 472); "Hacking for Defense": Solving National Security with Lean Startups Methods (MS&E 297).

1995-present. Founder and Faculty Co-Director. *Stanford Technology Ventures Program (STVP)*.

STVP is the innovation and entrepreneurship education center within Stanford's School of Engineering, including the *Mayfield Fellows Program* (an annual work/study program for 12 outstanding Stanford undergraduate students), the *Roundtable for Entrepreneurship Education* (50 summits of entrepreneurship faculty from top schools held in US, Asia, Latin America and Europe from 1998 to 2012), and the *eCorner* (a website of 3,000 video clips and podcasts of thought leaders).

2017-present. Principal Investigator. Office of Naval Research's Hacking for Defense (H4D) sponsored project.

2011-2016. Lead Principal Investigator and Director. NSF's National Center for Engineering Pathways to Innovation (Epicenter) sponsored project.

1995-present. Academic Director. Various educational programs: *Stanford Executive Institute*; *Stanford/UAE National Entrepreneurship Curriculum*; *Stanford/Malaysia National Entrepreneurship Education Program*.

2005-2010. Visiting Professor. *London Business School and University College London* in the U.K. (2005); *Higher Colleges of Technology in the United Arab Emirates* (2006-2010); *UNC Chapel Hill/Duke* (2018).

1998-2002. Associate Professor (Teaching). *Department of Management Science and Engineering*.

1994-1998. Adjunct Professor (1995-1998); Lecturer (1994-1995). *Department of Management Science and Engineering*.

### **Education**

1980-1982. Ph.D., Business Administration (concentration in Management Science), Haas School of Business, *University of California, Berkeley*. Regents Scholar. Dissertation: "Optimal and Near-Optimal Policies for Discrete Deterministic Dynamic Programming Models."

1978-1980. M.B.A., Haas School of Business, *University of California, Berkeley*.

1971-1975. B.S., Industrial Engineering and Operations Research, *University of California, Berkeley*. Graduation with Highest Honors, Phi Beta Kappa, and Tau Beta Pi.

## **Other Teaching Experience**

1994-1995. *University of California, Berkeley*. Lecturer at Haas School of Business. Courses: Entrepreneurship and High-Technology Marketing Management.

1979-1982. *University of California, Berkeley*. Lecturer in Industrial Engineering and Operations Research (Course: Engineering Economics); Lecturer, Research Assistant, and Teaching Assistant in Haas School of Business (Courses: Information Systems, Computing, and Management Science).

## **Selected Funding Sources and Programs**

2017-2020. Office of Naval Research (ONR)'s Hacking for Defense. Principal Investigator (Course Director). "Supported by ONR with a \$3.6 million grant, Hacking for Defense (H4D) is a university-sponsored class that allows students to develop a deep understanding of the problems and needs of government sponsors in the US Department of Defense and the Intelligence Community. In a short time, students rapidly iterate prototypes and produce solutions to sponsors' needs. For universities, it keeps their programs attached to real-world problems and provides students with an experiential opportunity to become more effective in their chosen field, with a body of work to back it up. For government agencies, it allows problem sponsors to increase the speed at which their organization solves specific, mission-critical problems. This project aims to spread this curricula to at least 20 colleges by 2020."

2015-2018. UAE/Stanford Innovation and Entrepreneurship Course. Academic Director.

"In partnership with the Prime Minister's Office and the Ministry of Education in the United Arab Emirates, our team at STVP and the Vice Provost for Teaching and Learning developed and deployed a one-semester syllabus combining design thinking and entrepreneurial leadership. In addition to Islamic Studies, this course is now taught by local UAE faculty trained by Stanford and is now required of undergraduate students at all colleges and universities in the UAE. This curricula could be licensed with other countries around the globe."

2011-2017. National Science Foundation's (NSF) National Center for Engineering Pathways to Innovation (Epicenter). Lead Principal Investigator and Director.

"Epicenter's funding from NSF began in 2011 with a commitment of \$10 million. Managed by Stanford University and our STVP unit, this national center became a laboratory to explore ways to help engineering and computer science undergraduate students develop the knowledge, skill sets and mindsets to help them be more innovative and entrepreneurial throughout their professional careers. Our team experimented with many fresh approaches, analyzed problems, utilized new tools, collaborated with our community, and tested potential products. After our exploratory time, we created three products: the Fostering Innovative Generations Studies (FIGS) research initiative, the University Innovation Fellows (UIF) program for students, and the Pathways to Innovation Program for faculty and administrators. We then led these three core initiatives until 2017 and engaged a large community of educators and students across the country. Through our core initiatives and partnership activities, we reached 300 US institutions; nearly 200 of those engaged with at least one of our core initiatives, and nearly 100 are engaged with two or more of our core initiatives. We hosted dozens of events, workshops and conference sessions, including annual gatherings for our program participants, two large summits for HBCU leaders, and a workshop to design new research questions. Our approaches and methodologies grew to encompass areas such as lean startup, design thinking, creativity, social entrepreneurship, and the maker movement. Both FIGS and UIF continue to operate independently."

## **Industry Experience**

1995-Present. Thuuz and Flywheel Ventures. Board of Directors. Previously served on company boards including Visio (acquired by Microsoft), AlphaBlox (acquired by IBM), and Reactivity (acquired by Cisco).

1994-1998. Interval Research Corporation. Senior Business Advisor. Lab funded by Paul Allen, Microsoft.

1990-1993. Slate. President and Co-founder. Managed growth from start-up stage to full supplier of software applications in emerging field of pen and mobile computing. Company's assets sold to Compaq in 1993.

1985-1990. Symantec. Executive Vice President and General Manager. As a corporate officer, led product development, marketing, and support for several product divisions including antivirus and security software during the formative years through its IPO (SYMC).

1982-1985. Digital Research. Group Product Manager.

1975-1977. Accenture (previously named Andersen Consulting). Management Consultant.

### **Stanford University Service**

2016-present University Committee on Undergraduate Majors (C-RUM).

2016-present University Committee on Professional/Executive Education (VPTL/SCPD).

2015-present University Faculty Athletic Fellows (Baseball).

2014-present University Committee on Bing Overseas Studies Program (BOSP).

2014-present Stanford's Distinguished Careers Institute (DCI).

2012-2015 Undergraduate Studies Advisory Council.

2007-2012 University Committee on Undergraduate Standards and Policies (C-USP).

2006-present School of Engineering's Undergraduate Council.

2006-2008 Faculty Liaison, Stanford Board of Trustees (Committee on Development).

2006-present Pre-Major Faculty Advisor, Freshmen and Sophomores.

2004-present Teaching Committee, MS&E department.

2002-2005 Chairman, University's Committee on Public Events (COPE).

2001-2010 Deputy Department Chair, Department of Management Science and Engineering.

2001-2006 Summer Session Director, Management Science and Engineering.

2001-2002 Host of the Dean's Visiting Committee, Management Science and Engineering.

1998-2001 Committee to create Management Science and Engineering department.

### **Awards and Honors**

*The Nannerl Keohane Distinguished Visiting Professorship at the University of North Carolina at Chapel Hill and Duke University*, 2018.

*Engineering Entrepreneurship Pioneer Award*, ASEE Entrepreneurship Division, which is given for lifetime achievement, 2015.

*Undergraduate Teaching Award*, MS&E Department, Stanford University, 2015.

*Endowed Chair in Entrepreneurship Education*, School of Engineering, Stanford University, 2012.

*Gordon Prize*, National Academy of Engineering (NAE), which is its highest award for teaching, 2009.

*Hall of Fame*, Haas Alumni Network, University of California Berkeley, 2010.

*Olympus Innovation Award* (for entrepreneurship education) VentureWell (formerly NCIIA), 2008.

*Gores Award* at Stanford University (university's highest award for excellence in teaching), 2005.

*Kauffman Award* (for excellence in engineering and technology entrepreneurship education), American Society of Engineering Education (ASEE), 2005.

*Outstanding Entrepreneurship Educator of the Year Award*, United States Association for Small Business and Entrepreneurship (USASBE), 2005.

STVP was awarded the *NASDAQ Center for Entrepreneurial Excellence Award* by the National Consortium of Entrepreneurship Centers, 2004.

*National Leavey Award for Excellence in Private Enterprise Education*, Freedoms Foundation, 2003.

*Tau Beta Pi Award for Excellence in Undergraduate Teaching*, Stanford School of Engineering, 2002.

*Bass University Fellow in Undergraduate Education*, which is a university-wide endowed chair given by Stanford for major contributions to undergraduate education, 2002.

STVP was awarded the *National Specialty Program Award* by the United States Association for Small Business and Entrepreneurship (USASBE), 2002.

*Edwin M. Appel Prize* for "bringing entrepreneurial vitality to academia" at the Price-Babson Symposium for Entrepreneurship Education, 1999.

*Northern California Entrepreneur of the Year Award* in the "supporter/educator" category, Ernst & Young competition, 1998.

*Innovation in Pedagogy Award*, Academy of Management for the Mayfield Fellows Program, 1998.

## **Publications**

Byers, Dorf, and Nelson, *Technology Ventures: From Idea to Enterprise*, McGraw-Hill Education, 5<sup>th</sup> Edition, ISBN 9781259875991, January 2018.

"For business, engineering, and science students and professionals who demand a comprehensive guide to high-growth entrepreneurship, *Technology Ventures* is the leading resource for analyzing opportunities and building new enterprises. Drawing on the latest academic research and practitioner insights, *Technology Ventures* integrates clear theoretical frameworks with action-oriented examples and exercises. A broad perspective on technology including information technology, clean tech, and life sciences ensures broad appeal to anyone with an interest in high-potential ventures. The 1st edition in 2004 was the first textbook to focus on high-growth entrepreneurship with new editions published in 2007, 2010, 2014, and 2018."

Byers and Weilerstein: "Entrepreneurship and Innovation in Engineering Education" in *Advances in Engineering Education*, Volume 5, Issue 1, ASEE, Washington DC, Winter, 2016.

Nelson and Byers, "Challenges in University Technology Transfer and the Promising Role of Entrepreneurship Education" in *Handbook of University Technology Transfer* (Link, Siegel, and Wright, eds.), University of Chicago Press, Chicago, pp. 138-166, ISBN 9780226178349, 2015.

Byers, Seelig, Sheppard, and Weilerstein, "Entrepreneurship: Its Role in Undergraduate Education" in *The Bridge*, National Academy of Engineering, Volume 43 Number 2, Summer 2013.

Byers and Nelson: "Organizational Modularity and Intra-University Relationships Between Entrepreneurship Education and Technology Transfer" in *University Entrepreneurship and Technology Transfer: Process, Design, and Intellectual Property*, Elsevier, pages 275-311, 2005.

Byers, Keeley, Leone, and Parker: "The Impact of a Research University in Silicon Valley: Entrepreneurship in Alumni and Faculty" in *Journal of Private Equity*, Winter 2000.

Byers, Sutton and Kist: "The Characteristics of Entrepreneurs" in *The Handbook of Technology Management*, CRC Press and IEEE Press, 1998.

Byers and Waterman: "A Dynamic Programming Algorithm to Find All Solutions in a Neighborhood of the Optimum" in *Mathematical Biosciences*, 1985.

Byers and Waterman: "Determining All Optimal and Near-Optimal Solutions when Solving Shortest Path Problems in Dynamic Programming" in *Operations Research*, 1984.

#### **Selected Ph.D. Dissertation Committees**

##### Reading

Melissa Graebner, MS&E (UT Austin)  
Keith Rollag, MS&E (Babson)  
Chris Bingham, MS&E (UNC Chapel Hill)  
Victor Seidel, MS&E (Boston College)  
Soong Moon Kang, MS&E (Univ. College London)  
Nathan Furr, MS&E (INSEAD)  
Ben Hallen, MS&E (University of Washington)  
Ann Miura-Ko, MS&E (industry, Floodgate Ventures)  
Emily Cox, MS&E (University of Washington)  
Sam Garg, MS&E (Hong Kong Univ. of Science and Tech.)  
Rory McDonald, MS&E (Harvard Business School)  
Sruthi Thatchenkery (University College of London)  
Henning Piezunka, MS&E (INSEAD)

##### Oral Defense

Ken Ko, MS&E (chair)  
Ted Acworth, ME (chair)  
Kenton Yee, Business (chair)  
Fermi Ashaboglu, MS&E  
John Feland, ME (chair)  
John Taylor, CEE (chair)  
Ning Jia, Business (chair)

#### **Selected Advisory and Editorial Boards**

- Current
  - Menlo College (Board of Trustees and Executive Committee).
  - H4Di non-profit to spread "Hacking for Defense" courses to other USA schools
  - Conservation International's Leadership Council.
  - Harvard Business School's California Research Center.
- Previous
  - UC Berkeley's Center for Entrepreneurship and Technology in the College of Engineering.
  - American Society of Engineering Education's Entrepreneurship Division.
  - World Economic Forum's Technical Advisory Board (Education) and Tech Pioneers Judge.