

James R. Fruchterman

MacArthur Fellow, Technology and Social Entrepreneur

EDUCATION

B.S. (1980) in Engineering, California Institute of Technology

M.S. (1980) in Applied Physics, California Institute of Technology

1980-1981, pursued doctoral studies in Electrical Engineering at Stanford University

PROFESSIONAL EXPERIENCE

Founder, President and CEO, Benetech (1989 – Present)

Benetech's goal is to use the power of technology to serve humanity. Projects include:

- Bookshare, the world's largest accessible library of scanned books and periodicals, providing people with visual or print disabilities access to a dramatically increased volume of print materials.
- Martus, a secure information management tool that allows human rights investigators to collect, safeguard, and disseminate information about human rights violations.
- Human Rights Data Analysis Group (HRDAG), consulting expertise and tools for each stage of human rights data projects: collection, management, with advanced statistical analysis.
- Route 66 Literacy, an Internet-based application serving adolescent and adult beginning readers with developmental disabilities.
- Miradi, project management tools that help practitioners design, manage, monitor and learn from their projects allowing them to more effectively meet their conservation goals.
- SocialCoding4Good is an online platform to match skilled software development volunteers from the technology sector with open source social good projects.
- Arkenstone, the leading maker of reading machines for the blind during the period 1989-2000, delivered in a dozen languages to over 35,000 people in 60 countries. Social enterprise sold to a for-profit company, Freedom Scientific, generating roughly \$5 million for Benetech's most recent projects.

Co-Founder and Director, RAF Technology, Inc. (1989 – present), CEO (1989-1995), CFO (1995-2004)

RAF Technology is a leader in software and enterprise solutions for optical character recognition systems, especially for postal applications.

Co-Founder and Vice President, Calera Recognition Systems (1982 – 1989)

Calera developed character recognition that allowed computers to read virtually all printed text. Calera is now part of Nuance, a public company and the U.S. leader in character recognition solutions.

PATENTS

U.S. Patent Number 5,470,223: System and Method for Tracking a Pedestrian

U.S. Patent Number 7,774,229: Methods of anti-spam marketing

PUBLIC SERVICE

- Member of the Board of Directors, ZeroDivide, foundation investing in community enterprises that leverage technology to benefit people in low-income and other underserved communities (2007-present)
- Member, Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities, a federal advisory committee established by Higher Education Opportunity Act of 2008 to make recommendations to improve the quality and abundance of accessible instructional materials (2010-2011)
- Technical Advisory Committee Member, National Instructional Materials Accessibility Standard, U.S. Department of Education (2005-2009)
- Advisory Committee Member, National Instructional Materials Accessibility Center, U.S. Department of Education (2006-present)
- Member, the Community Partnership Committee, which oversees a diversity and disability agreement with AT&T (2003-2008)
- Member of the Advisory Board, Telecommunications Access Rehabilitation Engineering Research Center, a joint effort of the Trace R&D Center of the University of Wisconsin-Madison and the Technology Access Program of Gallaudet University (2001-2009)
- Founding Member, Board of Directors of the Social Enterprise Alliance (2000-2010), Chair (2008-2010)
- Panelist, National Science Foundation Small Business Innovation Research Program (1998, 2000, 2003)
- Member, Electronic Information and Technology Access Advisory Committee, a federal advisory committee responsible for drafting federal acquisition standards for accessibility under Section 508 (1998-1999)
- Member, Telecommunications Access Advisory Committee, a federal advisory committee responsible for making recommendations to the U.S. Access Board and Federal Communications Commission on implementing portions of the 1996 Telecommunications Act (1996-1997)

AWARDS AND RECOGNITION

- John D. and Catherine T. MacArthur Foundation Fellowship, 2006
- Duke University, CASE Award for Enterprising Social Innovation, 2011

- Brigham Young University, Center for Economic Self-Reliance Social Innovator of the Year, 2009.
- Dr. Jacob Bolotin Award from the National Federation of the Blind, July 2008 (for Bookshare.org)
- AT&T Technology Innovation Award from the Alliance for Technology Access, March 2008
- Fred Strache Leadership Award from the California State University, Northridge, 2007
- Skoll Award for Social Entrepreneurship, 2004 and 2006
- Fast Company Social Capitalist Award: Top 20 Groups Changing the World, 2004
- Laureate, The [2001](#) and [2003](#) Tech Museum Awards (for the Bookshare.org and Martus projects)
- [American Library Association Francis Joseph Campbell Award 2003](#)
- [Schwab Foundation Social Entrepreneur Award](#) of 2003: attended the World Economic Forum in Davos from 2003 through 2007 and 2010
- 2003 Finalist, World Technology Award (Social Entrepreneurship)
- [Runner-up, Yale-Goldman Sachs National Nonprofit Business Plan Competition, 2003](#)
- American Foundation for the Blind Access Award, 2003 and 1996
- Robert S. Bray Award, The American Council of the Blind
- [Winner, Education Category, 2002 Stockholm Challenge](#) (for the Bookshare.org project)
- [Fast 50 Champion of Innovation](#), 2001
- Judge, 2002 and 2006 Global Social Venture Competition
- Finalist, 1996 Discover Magazine Awards for Technological Innovation

PUBLICATIONS (Selected)

- Fruchterman, J. (March 2011). [For Love or Lucre](#). In *Stanford Social Innovations Review*, Stanford University.
- Fruchterman, J. (2008). [Developing Information Technology to Meet Social Needs](#). In *Innovations*, MIT Press.
- Emerson, J., Freundlich, T. & Fruchterman, J. (2006). [Nothing Ventured Nothing Gained, Addressing the Critical Gaps in Risk-Taking Capital for Social Enterprise](#), published by Oxford Said Business School.
- Fruchterman, J. (2008). Accessing Books and Documents (chapter). In M.A. Hersh & M.A. Johnson (Eds.), *Assistive technology for vision-impaired and blind people*. Springer Verlag.
- Fruchterman, J., & Vanderheiden, G. (2007, June 17). [Everyone deserves access to technology, online world](#). [Op-Ed] *The Sacramento Bee*, p. E1.
- Fruchterman, J. (2004, March 31-April 6). [Technology Benefiting Humanity](#). *Ubiquity*, 5.
- Fruchterman, J. (2003). [In the Palm of Your Hand: A Vision of the Future of Technology for People with Visual Impairments](#). *Journal of Visual Impairment and Blindness*, 97(10), 585-591.

- Lingane, A., & Fruchterman, J. (2003, October). [The Chafee Amendment: Improving Access to Information](#). *Information Technology and Disabilities*, 9(1).
- Kerscher, G., & Fruchterman, J. (2002, June). The Soundproof Book: Exploration of Rights Conflict and Access to Commercial EBooks for People with Disabilities. *First Monday*, 7(6). Retrieved March 29, 2008, from http://www.firstmonday.dk/issues/issue7_6/kerscher/index.html.

INVITED PRESENTATIONS (Selected)

- [“Social Change at Scale – That’s Innovation!”](#) May 2012, TEDxSanJoseCA 2012, San Jose, CA.
- [“The Power of Failure, People and Karma Banking,”](#) May 20, 2012, Commencement speech, St. Mary’s College, Moraga, CA.
- “Raising the Floor,” October, 2011, Keynote Speech, Association for Education and Rehabilitation of the Blind and Visually Impaired Conference, Cleveland OH.
- Keynote speech, IEEE Sections Congress, August 2011, San Francisco, CA.
- [“Making the Book Truly Accessible,”](#) February 2011, Keynote Speech, Tools of Change Conference, New York, NY.
- Keynote Speech, September, 2008, Social Enterprise World Forum, Edinburgh, Scotland.
- “Raising the Floor: Providing Accessible Technology and Content to Every Person with a Disability on the Planet,” July, 2008 Keynote Speech, International Conference on Computers Helping People with Special Needs, Linz, Austria.
- “Raising the Floor,” March, 2008 Keynote Speech, CSUN Conference on Technology and Persons with Disabilities.
- Keynote Speech, 2007 NCTI Technology Innovators Conference, Washington, DC.
- Keynote Speech, 2006, Global Social Venture Competition Finals, New York City.
- [“It’s Not Rocket Science: Building Social Enterprises,”](#) 2006 Keynote Speech, 7th Gathering of the Social Enterprise Alliance.
- Keynote Speech, 2006, 7th International Association for Pattern Recognition Workshop on Document Analysis Systems, Nelson, New Zealand.
- Keynote Speech, 2005, Alliance for Technology Access Institute
- [“Building a Global Library for People with Print Disabilities,”](#) 2005, World Summit on the Information Society, Tunis.
- [“Innovating Information Technologies to Protect Human Rights,”](#) a speech for the World Affairs Council of Northern California, February 2004
- [“Setting the 2004 Agenda: Technology,”](#) speaker at the World Economic Forum, Davos, Switzerland, January 2004
- [“When Markets Fail, Who Responds?”](#) Discussion Leader at the World Economic Forum, Davos, Switzerland, January 2003.
- [“Technology and Human Rights,”](#) University of Peradeniya, Sri Lanka, November, 2003
- [“Technology for Nonprofits,”](#) with Michael Gilbert, National Gathering for Social Entrepreneurs, Minneapolis, Minnesota, December, 2002
- [“Bookshare.org: Large Scale, Web-Based Accessible Books,”](#) TechShare conference organized by the Royal National Institute of the Blind, Birmingham, UK, November 2002
- [“In the Palm of Your Hand,”](#) Keynote Speech, 2003, World Blind Union Asia Pacific Conference, Singapore.
- [“Seizing Market Failure as an Investment Opportunity,”](#) Keynote Speech, 2003, Business for Social Responsibility Annual Conference, Los Angeles.

- *“Putting Technology to Work for Development,”* speech at the United Nations to the joint meeting of the World Technology Network and UNOPS, July 2002.
- Stanford Social Entrepreneurship Conference, January 2002.
- *“Developing Partnerships for Assistive and Universally Designed Technology for Persons with Disabilities,”* August 4, 1998 Testimony before Subcommittee on Technology, U.S. House of Representatives Committee on Science.

PROFESSIONAL ASSOCIATIONS

Association for Computing Machinery

Institute of Electrical and Electronics Engineers

American Association for the Advancement of Science

Social Enterprise Alliance