
SUMMARY

Entrepreneur-executive-innovator-educator. Acknowledged leader in technology incubation and commercialization with extensive startup experience and considerable expertise in raising venture capital, angel financing, strategic investments and government grants. Proven track record as an entrepreneur in multiple industries with earlier roles in sales, business development, event marketing/evangelism and engineering at IBM and Microsoft. Skilled public speaker and dealmaker. Developed undergraduate entrepreneurship program at Michigan State University. Teach undergraduate and graduate college courses in entrepreneurship and innovation.

MAJOR ACCOMPLISHMENTS

- Co-founder and president of **Advanced Diamond Technologies, Inc.** based on technology from the U.S. Dept. of Energy. Named 2007 Technology Pioneer by the World Economic Forum. Twice attended annual meeting in Davos, Switzerland. Runner-up in *Wall St. Journal's* Technology Innovation Award. Excellence in Entrepreneurship award from National Science Foundation. Named one of the "Best Startups in America" in 2010. Raised \$12 million in equity and over \$9 million in government contracts.
- CEO of **Moving Parts LLC**, a profitable young company that makes puzzles and brain games.
- Twice provided witness testimony for U.S. House of Representatives Committee on Science and Technology, Subcommittee on Research & Science Education.
- Mentor in the first cohort of the National Science Foundation's **Innovation Corps**. Training at Stanford.
- Initiated, negotiated and closed \$25 million equity investment for **Microsoft**.
- Developed and implemented innovative expansion of **IBM's** Business Partner program resulting in the industry's first complementary marketing relationship between a computer vendor and a CPA/consulting firm. Became model for the IT industry.
- Member of **IBM's** Golden Circle. President's Award.
- Contributor to *Forbes* on topics related to leadership, entrepreneurship and technology commercialization.

EXPERIENCE

- **Michigan State University** 2015-present
Director of Undergraduate Entrepreneurship
Conceived, developed and launched (in 2016) first cross-campus, inter-disciplinary program for over 600 entrepreneurship students. Named a Top 25 program by the *Princeton Review* in 2018. Teach and develop courses in entrepreneurship, innovation and blockchain.
- **Illinois Partners Executive Services, LLC, President** 2000-present
Founder of venture advisory and consulting firm specializing in technology commercialization and interim executive assignments. Overlaps with full time role at Advanced Diamond Technologies. Projects include:
 - **CEO** of Moving Parts LLC, designer/maker of puzzles and brain games sold at retail. (2014-present).
 - **Entrepreneur in Residence** at Energy Foundry (2014-present).
 - **Advisor** to Wearifi, Inc., an innovative startup in the wearable space (2015-present).
 - **Advisor** to NeuroLux, an innovative neuroscience/optogenetics startup (2015-present).
 - **Entrepreneur in Residence** and Consultant at Northern Illinois University (2011-2014).
 - **Project Manager** for Rev3, an incubator/innovation center in suburban Chicago (2013-2014).
 - **Consultant** to Gas Technology Institute advising on commercialization strategies for grid-scale energy storage technology. (2013-2014).
 - **Founding CEO**, GlucoSentient, Inc., a point-of-care medical device company. First recipient of NSF Innovation Corps grant and Phase I and II SBIRs. Technology licensed from the University of Illinois (2011-2013).

- **Consultant** to Saint Louis University on a system for detecting threats from severe weather-related events (2012).
- **Advisor** to KWJ Engineering. Silicon Valley-based developer of miniature gas sensors for industrial monitoring, consumer safety and mobile health applications (2011-present).
- **Consultant** to the Illinois Science and Technology Coalition. Performed a strategic analysis and wrote a position paper on how to grow the nanotechnology economy in Illinois. Wrote position paper and business plan for the Illinois Manufacturing Laboratory (2011-2013).
- **Entrepreneur in Residence**, Illinois Ventures, LLC. Interim executive working with academic faculty founders to create startup businesses based on university technology (2004-2006).
- **Founding CEO** of SolarBridge Technologies (fka SmartSpark Energy Systems), a power electronics/photovoltaic company (2004-2006).
- **Advisor** to Sempruis, Inc. a pioneer in flexible electronics (2004-2005).
- **Co-Executive Director** of the Illinois Technology Enterprise Center at Argonne, a joint venture between the State of Illinois' Dept. of Commerce and Economic Opportunity, the University of Chicago and Argonne National Laboratory (U.S. Department of Energy). Formed companies based on Argonne's technology portfolio. Mentored scientists/inventors in technology commercialization (2002-2003).
- Due diligence of Kleiner Perkins-backed Silicon Valley Internet audience tracking company (2001).
- Commercialization assessment of text-based search engine for The University of Chicago (2001).
- Developed strategy and pitch that enabled client to win \$170,000+ contract with Oracle (2001).
- **Advanced Diamond Technologies, Inc.**, www.thindiamond.com Romeoville, IL 2002-2011
President, CEO, Board Member and Co-founder
 World leader in the development and application of diamond thin-film technology. Spinoff from Argonne National Laboratory. Brought award-winning products to market in multiple industries with recurring commercial sales. Raised over \$12 million in venture capital in addition to numerous government grants and contracts. Recipient of many entrepreneurship and technical awards.
- **Microsoft Corporation**, Chicago 1997-2000
 - **Regional Business Development Manager** 1999-2000
 Founding member and Midwest manager of national team focused on e-commerce and application service providers (SaaS).
 - **TechNet Program Manager** 1998-1999
 Launched TechNet, a marketing outreach/technical evangelism program targeting IT professionals. Achieved 135% of targeted attendance at 10% under budget. 43,000 IT professionals attended seminars. Managed over 250 events during FY99. Winner of branch manager award.
 - **Internet Channel Account Executive** 1997-1998
 Recruited and managed web developers, ISPs and media companies in partnering programs to secure market share during the "browser wars".
- **Various**, Chicago 1993-1997
 - Chief Operating Officer for a dotcom.
 - Founder and VP of a B2B exchange in the foodservice industry. Raised seed capital from Heinz and Nabisco.
 - Founder of manufacturer and distributor of gourmet barbecue sauce.
- --- Year abroad in Australia and Japan completing MBA--- 1991-1992
- **International Business Machines Corporation (IBM)**
 - **Marketing Representative**, Chicago and Rolling Meadows, IL 1986-1991
 Closed \$4.5 million in sales of hardware and software for three enterprise accounts. Generated \$2 million in competitive wins in disk storage and client/server database areas. Managed IBM's largest business partner. Numerous sales awards including Golden Circle and President's Award.
 - **Manufacturing Engineer**, San Jose, CA 1985-1986
 Designed electromechanical tooling for robotics system to automate the assembly of disk drives.

EDUCATION

The University of Chicago

Evening Program, 1991

MBA with concentrations in Financial Management and Policy Studies. Dean's List. Year abroad.

- **Institute for International Studies and Training:** Scholarship awarded by Japan's external trade organization (JETRO) to international management program, Fujinomiya, Japan.
- **Australian Graduate School of Management:** At the University of New South Wales, Sydney.

University of Illinois at Urbana-Champaign

1985

B.S. Mechanical Engineering, High Honors, Dean's List. Paid 100% of tuition with merit scholarships.

PROFESSIONAL ACTIVITIES AND CERTIFICATIONS

- **Advisory**

- Reviewer for the National Science Foundation's SBIR/STTR program.
- Member of the Illinois Innovation Council (2011-2014) appointed by Governor Pat Quinn.
- Member of the due diligence team of the Invest Illinois Venture Fund Program (2011-2013).
- Advisory board member of Illinois Nanotechnology Collaborative (2011-present).
- Mentor/coach on Lean Startups at Illinois Institute of Technology (2013).
- Member of Industry Advisory Board of Nanotech Employment, Education and Economic Development Initiative (2013-2015).
- Reviewer for National Resource Council of the National Academies Symposium Proceedings *Building the Illinois Innovation Economy* (2013).
- Judge for R&D 100 Award (2012).
- Lecturer and mentor at the Founder Institute (2012-2013).
- Judge for Chicago Booth School of Business New Venture Challenge (2012-2015).
- Mentor for the National Science Foundation's Innovation Corps (2011).
- Advisory board member of the Chicagoland Entrepreneurial Center. Helped to make seed stage investment decisions (2009-2010).

- **Contributor:** To *Forbes.com* and *Tech.co* on topics related to entrepreneurship, leadership and technology commercialization.

- **Blogger:** On entrepreneurship at www.illinoispartners.com/blog.

- **Assistant Instructor:** *The Dale Carnegie Course in Effective Speaking and Human Relations*.

- **Online certifications**

- Bitcoin and Cryptocurrencies (on edX)
- Blockchain: Understanding Its Uses and Implications (on edX)

- **Improvisational Acting:** Six years of experience; Second City training.

- **Extensive travel:** Africa, Asia, Australia and Europe. Climbed Mt. Kilimanjaro.

TEACHING

- Michigan State University

- Taught: *The Art of Starting* (aka "Entrepreneurship 101"), 2017-2018
- Taught Executive MBA Course: *Innovation of Products and Services*, 2019
- Conceived, created a taught: *Blockchain: Foundations and Applications*, 2018

PRESENTATIONS AND PUBLICATIONS

Presentations

- October 2019—"Undergraduate Entrepreneurship: From Zero to 500 in Two Years" talk at Global Consortium of Entrepreneurship Centers (GCEC) Conference, Chicago, IL.
- September 2019—"Creating a Culture of Entrepreneurship on Campus" interview on Michigan Business Network, <http://www.michiganbusinessnetwork.com/blog/creating-a-culture-of-entrepreneurship-on-campus>
- September 2018—Moderator of panel on entrepreneurship at "Israel at 70: Complexity, Challenge and Creativity" Conference, Michigan State University, East Lansing, MI.
- March 2018—"Undergraduate Entrepreneurship: From Zero to 500 in Two Years" talk at VentureWell OPEN, Austin, TX.
- April 2017—"Beyond the Classroom - Trep Talk" interview on Michigan Business Network, <http://www.michiganbusinessnetwork.com/blog/beyond-the-classroom>
- April 2017—Invited keynote at the Michigan China Forum sponsored by the Broad China Business Society, East Lansing, MI.
- April 2014—Invited participant in National Science Foundation workshop on Cultivating Entrepreneurship Networks, Arlington, VA.
- April 2014—"Startups, Leadership and Transition," presentation at MBA Colloquium Executive Lecture Series, Northern Illinois University, Naperville, Illinois.
- May 2013—National expert panel member, Lab-to-Market Inter-Agency Summit, White House Conference Center, Washington, DC.
- July 2012—Witness for U.S. House of Representatives Committee on Science, Space and Technology, Subcommittee on Research & Science Education Field Hearing. Panel topic: *Innovation Corps: A Review of a New National Science Foundation Program to Leverage Research Investments*, Chicago, IL.
- June 2012—Speaker at TechConnect in Santa Clara, CA on recycling plastics.
- March 2012—Invited speaker at the *Science Means Innovation* event on Capitol Hill. Sponsored by the National Science Foundation, Washington, DC.
- February 2012—Guest lecturer in entrepreneurship class at Kellogg School of Management, Evanston, IL
- December 2011—Invited speaker at University of Illinois Professional Science Master's Industry Seminar: *Science Entrepreneurs—Business Creation Intersecting Science + Business*.
- November 2011—Guest Lecturer at University of Illinois Series: *Lectures in Technology Entrepreneurship*.
- November 2011—Invited speaker at University of Chicago Booth School of Business, Polsky Center for Entrepreneurship Innovation Workshop Series titled *What Starts Here Changes the World*.
- November 2011—Guest lecturer on entrepreneurial finance, MBA class at DePaul University, Chicago, IL
- October 2011—Panelist at a function titled "Becoming an Entrepreneur" hosted by the Illinois Chamber of Commerce and MidAmerica Club, Chicago, IL
- October 2011—Presentation titled "From Lab to Market" to the University of Chicago Booth School of Business Entrepreneurial Roundtable, Naperville, IL
- October 2011—Presentation on "Beyond Company Formation" at the incubator at the Research Park at the University of Illinois, Champaign, IL
- September 2011—Lecture on "Startups, Leadership and Transition" at the University of Notre Dame, South Bend, IN
- June 2011—Presentation on technology commercialization at the TAPPI (Technical Association of the Pulp and Paper Industry) International Conference on Nano for Renewable Materials, Washington, DC.
- April 2011—Lecture on entrepreneurship and start-up company formation, Kellogg Graduate School of Management, Evanston, IL
- September 2010—Keynote speaker on technology commercialization at Economic Development Club of Chicago.

- June 2010—Witness for U.S. House of Representatives Committee on Science and Technology, Subcommittee on Research & Science Education. Panel topic: *From the Lab Bench to the Marketplace: Improving Technology Transfer*, Washington, D.C.
- May 2010—Lecture on entrepreneurship and start-up company formation, Kellogg Graduate School of Management, Evanston, IL
- November 2009—Presentation on medical device applications of diamond at MidAmerica Healthcare Venture Forum, Madison, WI.
- November 2009—Panelist for The Illinois Coalition for Manufacturing Innovation: Access to Capital and Innovation in a Challenging Economy, Palatine, IL
- April 2009—Panelist for *NanoNow: An Illinois Science & Technology Leadership Forum*, Chicago, IL
- April 2009—Presentation on Advanced Diamond Technologies at InvestMidwest, Kansas City, MO.
- August 2008—Panelist for Tech Insiders Summit, Chicago, IL.
- May 2008—Presentation on Advanced Diamond Technologies at Michigan Growth Capital Symposium, Ypsilanti, MI.
- March 2008—Presentation on Advanced Diamond Technologies at World's Best Technologies, Dallas, TX.
- February 2008—Presentation on technology transfer at Economic Development Club of Chicago.
- February 2008—Presentation on Advanced Diamond Technologies at InvestMidwest, St. Louis, MO.
- February 2008—Advanced Materials Panel at IBF Nanotech Forum, Palm Springs, CA.
- November 2007—*Distinguished Speaker* at Collegiate Entrepreneurs' Organization conference at McCormick Place. Subject: Starting a Technology Venture, Chicago, IL.
- July 2007—Speaker on diamond wafers for MEMS at SEMICON West, San Francisco, CA.
- May 2007—Panelist on technology commercialization at Nanotech 2007, Santa Clara, CA.
- April 2007—Featured speaker on startup companies at Economic Development Club of Chicago.
- October 2006—Speaker on Advanced Diamond Technologies at Dow Jones Emerging Ventures conference, San Jose, CA.
- September 2006—Speaker on technology commercialization at "Commercialization of Nanomaterials" conference, Pittsburgh, PA.
- June 2006—Presentation on tech transfer and startup formation to group of academics, business development people and investors, Charlottetown, Prince Edward Island, Canada.
- June 2006—Finalist in Innovate Illinois, regional competition on innovation, Chicago, IL.
- May 2006—Presentation on using diamond to enhance lifetimes of mechanical seals, National Science Foundation Phase II Grantees Conference, Louisville, KY.
- April 2006—Keynote presentation (shared with Boeing) at Intertech, triennial industrial diamond conference, Atlanta, GA.
- February 2006—Invited presentation to SME (Society of Manufacturing Engineers) on diamond technology, Decatur, IL.
- October 2005—Panel presentation on tech transfer to economic development ministers from Atlantic Canada, Chicago, IL.
- June 2005—Invited presentation on Entrepreneurism, Academy for Entrepreneurial Leadership, College of Business, University of Illinois, Champaign, IL
- June 2005—Invited presentation on Technology Transfer to Dept. of Energy Industrial Technology Program Conference, Chicago, IL
- May 2005—Presentation on startup company formation at Applied Diamond Conference, Argonne, IL
- May 2005—Invited presentation on Advanced Diamond Technologies at Nanotech 2005, Anaheim, CA
- February 2005—Invited presentation on Advanced Diamond Technologies at Nanotech 2005, Tokyo.
- February 2005—Invited presentation on Advanced Diamond Technologies at PitchFest, part of Nanotech Investing Forum, Palm Springs, CA.
- November 2004—Presentation on SmartSpark Energy Systems at Energy Venture Fair, San Jose, CA.

- October 2004—Presentation on Advanced Diamond Technologies at NanoCommerce 2004, Chicago.
- December 2003—Presentation of NanoSi, Inc. at Tech Transfer Fair of NanoCommerce 2003, Chicago.
- December 2003—"Assessing Intellectual Property Risks and Opportunities in Mergers, Acquisitions and Venture Investments," NanoCommerce 2003 Conference, Chicago.
- October 2003—Presentation on Advanced Diamond Technologies, Inc., Nanotechnology Venture Fair, San Diego, CA.
- October 2003—"Do you want to be rich or famous?" Invited presentation at Nanomaterials Crossroads Conference, Montreal.
- September 2003—"Do you want to be rich or famous?" Keynote speech at World Nano-Economic Congress, Washington, D.C.
- June 2003—Panelist on tech transfer at Michigan Growth Capital Symposium, Ann Arbor, Michigan.
- June 2003—"Assessing Intellectual Property Risks and Opportunities in Mergers, Acquisitions and Venture Investments," Nanomaterials IP Landscape Conference, Chicago.
- February 2003—Presentation to Argonne National Laboratory Board of Governors on technology commercialization. Argonne, IL.
- November 2002—Presentation of Advanced Diamond Technologies, Civic Committee of the Economic Club of Chicago, Chicago.
- October 2002—Panelist, Nanotechnology Business Roadmap for Industry Conference, Chicago.
- October 2002—Presentation on Advanced Diamond Technologies, VentureOne Conference, Boston.
- September 2002—Presentation of Advanced Diamond Technologies, Inc., Nanotechnology Venture Fair, La Jolla, CA. Voted "Most Promising Company".
- September 2002—"A Framework for Technology Commercialization," COMS2002, Ypsilanti, Michigan.
- June 2002—Presentation to Chicago Manufacturing Center on startups. Chicago.
- May 2002—Panelist, Angel Investing Seminar, World President's Organization, Chicago.
- April 1999—Moderator and organizer of Microsoft's Digital Strategy Executive Series. Introduced Bill Gates as featured speaker. Chicago, IL.
- September 1998 to June 1999—Keynote presentations at Microsoft TechNet events in Illinois, Indiana and Wisconsin. Co-presentation with Steve Ballmer, September 1998.

Publications

- April 2014—"Solar Energy Is Heating Up Tech -- Even When The Sun Goes Down" guest contributor on Forbes.com.
- June 2012—"Illinois Nanotechnology Report: A Road Map for Economic Development". Later summarized in *IEEE Nanotechnology* (December 2012).
- June 2011—Featured on "Made in Chicago" segment on WBBM NewsRadio 78 in Chicago.
- October 2007—*Perfecting Nature's Perfect Material*, cover story in Ceramic Industry Magazine.
- June 2006—*How We Got the Money*, featured article in Innovation: American's Journal of Technology Commercialization.
- October 2005—*Characterization of Low-Temperature Ultrananocrystalline Diamond RF MEMS Resonators*, Proceedings of the European Microwave Conference.
- August 2004—"Entrepreneur in Residence" Featured in Champaign News-Gazette, August 1.
- March 2004—Guest columnist "Rich or Famous: You Choose" in Physics World magazine.
- October 2003—"He knows the ingredients in tech transfer," Featured in article in Chicago Sun-Times.
- April 2003—Quoted in article on nanotechnology, "The Next Material World" in IndustryWeek Magazine.
- June 2002—Quoted in "Baxter, Northwestern enter agreement for nanotech research" in ePrairie.
- April 2002—Quoted in "Nanolnk secures \$3 million" in ePrairie.
- April 2002—Featured columnist on ePrairie, "Crackpot or visionary? You make the call."
- March 2002—Featured columnist on ePrairie, "The Next Big Thing: Small technology."

Awards

- November 2018—Michigan State University undergraduate entrepreneurship program named a Top 25 program by the *Princeton Review*.
- September 2011—Asked by Governor Pat Quinn to serve on the Illinois Innovation Council
- May 2011—Appointed to advisory board of the Illinois Nanotechnology Collaborative
- August 2010—Appointed to Chicago Mayor Richard M. Daley's Committee on Technology Infrastructure
- July 2010—Named one of the "Best Startups in America" by Robert X. Cringley.
- February 2009—Named "Mover & Shaker" by Frost & Sullivan
- October 2008—IC Industry Award in the Enabling Materials category from *EuroAsia Semiconductor Magazine*.
- August 2008—Entrepreneurial Excellence Early Stage Award from *The Business Ledger*
- July 2008—R&D 100 Award for Mechanical Seals
- November 2007—Small Times Magazine Best of Small Tech Awards Finalist
- May 2007—Excellence in Entrepreneurship by National Science Foundation
- April 2007—ADT visited by U.S. Secretary of Energy Samuel W. Bodman
- December 2006—Named 2007 Technology Pioneer by World Economic Forum. Attended their annual meeting in Davos, Switzerland in 2007 and 2008.
- October 2006—Recipient of Frost & Sullivan's 2006 Product Innovation of the Year Award for diamond films.
- September 2006—Runner-up in materials category in *Wall St. Journal's* Technology Innovation Award.
- June 2006—Nano 50 Award winner, named by Nanotech Briefs Magazine.
- Inventor on U.S. patent number 8,232,559.