Greg Autry - Curriculum Vitae

Email: Phone: Education

PhD 2013 University of California, Irvine, The Paul Merage School of Business

Management, Economics & Public Policy concentration

Strategy Literature Comprehensive Exam

MBA 2002 University of California, Irvine, The Paul Merage School of Business

BA 1999 California Polytechnic University, Pomona

History (+ 72 units of Computer Science)

Academic Experience

Director Thunderbird Initiative for Space Leadership, Arizona State University, July 2022 – current

Clinical (full) Professor of Space Leadership, Policy and Business, Thunderbird School of Global Management, Arizona State University, April 2021 – current

Visiting Professor, Institute for Security Science and Technology, Imperial College London, December 2021 – 2022, reappointed for 2022 -2025

Adjunct Professor, Florida Institute of Technology / International Space University, Summer graduate certificate program on space entrepreneurship at Kennedy Space Center Visitor Complex, June 2019 –June 2022

Assistant Clinical Professor, University of Southern California, Lloyd Greif Center for Entrepreneurial Studies, Marshall School of Business, August 2014 – July 2020

Adjunct Professor, Lloyd Greif Center for Entrepreneurial Studies, Marshall School of Business, University of Southern California, August 2013 – July 2014

Adjunct Lecturer, Paul Merage School of Business, University of California, Irvine, September 2003 – June 2008 and Spring 2014

Governmental / Non-Profit Experience

Committee on the Review of the Small Business Innovation Research and Small Business Technology Transfer Programs at the National Aeronautics and Space Administration, National Academies of Sciences, Engineering, and Medicine, A two year, unpaid appointment to a Congressionally mandated review of NASA's SBIR and STTR programs. November 2023 – current

InSPA Business Case Subcommittee Chair, National Aeronautics and Space Administration (NASA), Contracted to Johnson Space Center via Aerospace Corporation to lead review of business models of In Space Production Applications (InSPA) proposals. March 2022 – current

Chair, Safety Working Group of the U.S. Commercial Space Transportation Advisory Committee (COMSTAC), FAA

Appointed by Secretary of Transportation to Federal Advisory Committee (FACA), 2018 – 2020, Reappointed 2020 – 2022

Chief Financial Officer Nominee, National Aeronautics and Space Administration (NASA),

Nomination July 27, 2020. Confirmation process delayed by COVID, Supreme Court Justice Confirmation debate and other "#2020 issues." Cleared committee on December 2, 2020, Senate Leader failed to schedule a vote before final session and nomination expired on January 2, 2021

Director, Pacific Commercial Spaceflight Initiative

Aldrin Space Institute (formerly Southern California Commercial Space Flight Initiative at the University of Southern California). Research work funded by sub-award grant from FAA AST and industry. August 2018 – July 2021

Vice President of Space Development, National Space Society

The oldest and most important grassroots space advocacy organization. May 2018 – Current

White House Liaison, National Aeronautics and Space Administration (NASA)

Temporary Presidential Appointment as NASA employee responsible for interfacing to the White House and onboarding new leadership. January - February 2017, ES Position

Member, Agency Review Team, National Aeronautics and Space Administration (NASA)

Member of eight-person executive team tasked with reviewing, analyzing, prioritizing NASA's goals, programs and budgets and developing space policy recommendations for the White House. The centerpieces of these recommendations were a sustainable return to the Moon (with a woman on 1st mission) leveraging international and public-private partnerships, reestablishing the National Space Council. These recommendations were implemented during the Trump administration and have been generally supported by the Biden administration as well. December 2016 –January 2017

Entrepreneurial and Professional Experience

Co-Founder, 121C Inc. / Elevated Materials

Commercial spacecraft carbon fiber upcycling into OEM manufactured goods. Raised over \$200k in crowdfunding and \$1.3 million in private seed capital. Negotiated material supply with SpaceX, Virgin, Toray, and Boeing. 2015 – Current

Co-Founder & CEO, Network Corps

Enterprise application development firm focused on enterprise solutions for Kaiser Permanente. Sold network-engineering division to Enhanced Technologies. 1997 –2014

CEO, Wired Images

Digital Web Content production for Internet retailers, sold to PlanetRx.com.1999 – 2000

Technical Services Manager, CompuCom Systems

Managed service operations for IT solutions at CompuCom after being acquired. 1994 – 1997

CEO, Riverside Doctor Micro Computer Services

Apple authorized dealer and Computer services firm sold to CompuCom Systems (NASDAQ: CMPC) in 1994. 1986 – 1994

Programmer, Hemascience Labs / Baxter Fenwal

Software development for medical device. 1984 – 1986

Software Engineer, Honeywell Training and Control Systems Division

Software for production engineering on various military projects. 1983 – 1984

CoFounder & CEO, HAL LABS

Entertainment Software developer. Founded in high school, this firm developed Atarisoft PAC MAN for Apple II and was eventually reorganized by my partner as Future Point and sold to Blizzard Entertainment. 1981-1994

Academic Service

Chair, Arizona State University Space Strategy Committee, 2023-current

Online MBA Curriculum Committee, USC Marshall, 2019-2020

Faculty Recruiting Committee, USC Greif Center, 2018-2019

IT Committee, USC Marshall, 2016-2020

Clinical Faculty Committee, USC Marshall, 2015-2016

Co-Director Maseeh Entrepreneurship Prize Competition, Viterbi School of Eng., 2014-2017 Council on Sustainability Education, University of California Irvine, 2012 – 2013

Outside Boards and Service

Editorial Board, New Space Journal

Peer reviewed journal focused on entrepreneurial space activities, founded by Dr. G. Scott Hubbard, Stanford University, edited by Ken Davidian. 2015 – current

Editorial Board, Journal of Space Safety Engineering

Peer reviewed journal focused on issues related to the safety of space transportation systems. 2020 – current

Advisor, Relativity Space

Mentored former USC students Jordan Noone and Tim Ellis since the founding of their 3D Printed Rocket startup. Served as Advisor 2019-2021. Firm has raised over \$1.3 billion with a \$4B+ valuation.

Member of the Board, National Space Society

World's largest non-profit advocacy organization for space settlement. Founded by Werner von Braun (NSI) and Gerard K. O'Neill (L5). 2018 – current

Board Member, Interstellar Labs

New Space Startup headquartered in Paris, France. Dedicated to producing enhanced environmental control and life support systems (ECLSS) via a closed environment habitat (biodome) research and eco-tourist destination. Facilities targeted for construction in Mojave California and Kennedy Space Center. 2019 – Current

Chair, USC Commercial Spaceflight Initiative Workshops.

Speakers included: Charlie Bolden, Former NASA Administrator; Scott Pace, National Space Council Executive Secretary; George Whitesides, CEO Virgin Galactic; Kevin O'Connell, Director of the Office of Space Commerce; Brigadier General Steven Butow, Defense Innovation Unit. Fall 2018 & 2019.

Chair, International Space Development Conference 2019, Washington DC

One of the largest space conferences with @1,500 attendees. Speakers included: NASA Administrator Jim Bridenstine, NASA Associate Administrator for Science Mission Directorate Thomas Zurbuchen and National Space Council Executive Secretary Scott Pace.

Chair, Space Settlement Summit 2023, Phoenix Arizona

A National Space Society Conference, October 27-28.

Advisory Board Member, Space Force Association, 2023—Current
Advisory Board Member, Coalition for a Prosperous America, 2017—Current
Board Member, China California Heart Watch, 2011—2012
Board Member, American Jobs Alliance, 2012—2016
Senior Economist, Coalition for a Prosperous America, 2013—2016
Leader, U.S. Young Scholar & Experts Delegation to the Republic of China (Taiwan), 2012
PhD Class President, The Paul Merage School of Business, University of California, Irvine, 2008

Grants

FAA Office of Commercial Space Transportation grant, \$65,000 annual sub-award via the Aldrin Space Institute, Florida Institute of Technology. Raised matching funds from industry participants including Deloitte, SpaceX, Virgin, Aerospace Corp, JPL and NASA Ames. *Pacific Commercial Spaceflight Initiative*

Interdisciplinary Teaching Grant, \$20,000, Greg Autry (Marshall School of Business), Dana Milstein (Dornsife College of Letters, Arts and Sciences - Writing Program), and Vahe Peroomian (Dornsife College of Letters, Arts and Sciences - Physics and Astronomy) - *Terraforming Mars: A Sustainable Habitation and Development of Humanity's Second Home*

Awards

Chris Pancratz Memorial Space Activist of the Year 2021, National Space Society
PhD (peer) Teaching Awards 2010 and 2011, "Good with MBA Students Award" 2012
PhD Class President, Paul Merage School of Business, University of California, Irvine, 2008
Outstanding Teaching Assistant: Full Time, Fully Employed, and Executive MBA cohorts, 2012
Outstanding Teaching Assistant: Fully Employed and Executive MBA cohorts, 2011
Outstanding Teaching Assistant: Full Time, Fully Employed, and Executive MBA cohorts, 2010

Research Interests

Governmental influence on entrepreneurial environments

Commercial spaceflight, space policy and UAS policy

Innovation policy, trade policy, technology transfer and national competitive advantage

PhD Dissertation

Title: Governmental Roles in the Emergence of New Communities of High Technology Organizations

Committee: Yan Gong, Peter Navarro, Claudia Bird Schoonhoven

Proposal Defended: July 18, 2012; **Dissertation Defended:** July 25, 2013 **PhD Awarded:**

September 2013

Description: This dissertation examined the government influence on the environment in which a new community of entrepreneurial organizations emerges. The research context is New Space, entrepreneurial firms pursuing commercial space launch, satellite and related businesses. This dissertation contributes to the entrepreneurship, community ecology and institutional theory literatures.

Publications

Selected Academic Papers and Case Studies

Feltman, Miske, Autry, Ali 2023, "An Assessment of the Commercial Spaceport Ecosystem Through the Lens of Cape Canaveral Space Force Station" **under review** at *New Space Journal*

Metzger, P.T. and Autry, G.W., 2022, "The Cost of Lunar Landing Pads with a Trade Study of Construction Methods" *New Space Journal*.

Autry, Greg. 2021 "The functions of the FAA's commercial space transportation advisory committee: The safety working group's 2020 tasker as context." *Journal of Space Safety Engineering*.

Autry, G., Aldrin A. & Coutu, S. 2021 "An Economic Analysis of the Value of Space Flown Objects" (working paper)

Bhattacharya, B., Autry, G & Perry V. 2020 "Relativity Space: Rocketing into the Future of Manufacturing," *Greif Center Collection, Harvard Business School Publishing Case Catalog*

Autry, G. & Obasaju, L. 2018 "Mojave Spaceport: Entrepreneurship in the Public Sector," *Greif Center Collection, Harvard Business School Publishing Case Catalog*

Autry, G. September 2018 "Commercial Orbital Transportation Services: A Case Study for National Industrial Policy," *New Space Journal*.

Autry, G., Huang, L. 2014. "An Analysis of the Competitive Advantage of the United States of America in Commercial Orbital Human Spaceflight," *New Space Journal*. 2(2): 83-110 Based on research commissioned by the FAA Office of Commercial Space Transportation

Autry, G., Huang, L. 2016 Strawther, Zhu, "XCOR Aerospace: New Space, New Place?" *Greif Center Collection, Harvard Business School Publishing Case Catalog*

Autry, G., Huang L., Dann, Kim, Siward, "RelishMIX: Building Social Media Management Tools for Hollywood" *Greif Center Collection, Harvard Business School Publishing Case Catalog*

Autry, G. 2011 "Space Policy, Intergenerational Ethics and the Environment," *Proceedings of the American Institute of Aeronautics and Astronautics*. AIAA 2011-7033

Selected Academic Conference Presentations

Autry, G. and Davidian, K. 2019, "Process Approach for Organizational Change and Innovation Research", *Research Caucus, Academy of Management Conference*, Boston MA. Panel: Andy Van de Ven, Jennifer Woolley, Andy Aldrin

Autry, G. and Davidian, K. 2014 "Overview of U.S. National Competitive Advantage in Human Orbital Spaceflight," *American Institute of Aeronautics and Astronautics Annual Conference 2014*

Huang, L. and Autry, G. "Rebels with a Cause: Perceptions, Beliefs, and the Cooperative Dynamics of Entrepreneurs in the Emergence of the New Space Industry," Presentation at Babson College Entrepreneurial Research Conference, 2014

Book

Navarro, P. and Autry, G. 2011. *Death by China: Confronting the Dragon, A Global Call to Action*. Prentice Hall / Pearson. Amazon Bestsellers Ranks on 4/25/2018: #3 International Economics, #5 Political Freedom, #1 Trade & Tariffs

Textbook

Autry, G. *A New Entrepreneurial Dynamic*. FlatWorld, January 2022. https://catalog.flatworldknowledge.com/catalog/editions/new-entrepreneurial-dynamic

Book in Progress

Autry, G. 3,2,1... Disrupt. This book will provide case studies of ten entrepreneurial teams creating spacecraft technology startups in the emerging community known as "New Space." Forward by Charlie Bolden. Participating firms: Rocket Lab, Made in Space / Redwire, Sierra Nevada, Lynk, Virgin Orbit, Planet, Elevated Materials, Masten Space Systems, Interstellar Lab, Voyager.

Selected Business Press Articles

Autry, G. March 7, 2023, "Don't Panic! We Can Have A Rational Conversation About The Climate," Forbes

Autry, G. July 27, 2022, "Cyber Threats Beyond Earth: Securing In-Space Manufacturing," Forbes

Autry, G. July 19, 2021, "Billionaires' Ego-Driven Space Adventures Help Everyone," *Foreign Policy*

Autry, G. April 28, 2021 "Competition delivers the goods and the crew for all NASA commercial space services," *Space News*

Autry, G. January 26, 2021 "Oh No, Not Again: The Moon vs. Mars," Forbes

Weeden C. and Autry, G. February 8, 2021 "In Defense of Regulation," Space News

Autry, G. June 20, 2019 "Space Research Can Save the Planet - Again," Foreign Policy

Autry, G. and Bown, C. May 2018, "Is the Global Trade Systems Broken?," Debate, *The Economist Online*

Aldrin B. and Autry, G. September 20, 2017 "It Doesn't Take a Rocket Scientist to Run NASA", *Space News*

Autry, G. 2012 "New Space", Global Trade: 82-91.

Autry, G. and Navarro P. 2009 "Leveraging Business Cycle Ups and Downs," *Financial Executive Magazine*: 36–41

Forbes Contributor (regular)

Numerous other pieces in: Space News, The San Francisco Chronicle, The Los Angeles Times, The Orange County Register, The Baltimore Sun, Huffington Post

Conference Presentations and Panels

"Space Education Workforce," Space Symposium, Colorado Springs, CO. April 20, 2023

"How Close are We to The Brink?" and "Emerging Black Sky Resilience Solutions," *Resilient and Renewable Planet Conference*, Imperial College London, UK. April 17, 2023

"The Road to Artemis", Organized and moderated a Public Panel at Space Florida featuring Gen. Charles Bolden, the Honorable Jim Bridenstine, Bhavya Lal, Scott Pace et al. Exploration Park, Florida, August 28, 2022.

"International Moon Day", Organized and moderated an event at Imperial College London featuring the Honorable Jim Bridenstine, Michael Gold, Bhavya Lal, et al. London UK, July 20, 2022.

"This House Would Populate Mars," Debate at the Oxford Union (the world's premier debating society), University of Oxford England, February 3, 2022

"Space Vehicle Adaptations to the Mobility Revolution," Space Mobility Conference, Orlando Florida, February 2022

"Trade Tensions", UBS European Conference, London, UK. November 12, 2019

"The Economist Debate: Free Trade", *World Trade Symposium* (The Economist), New York City, November 7, 2019. Voted debate winner by audience.

"Mission Opportunities: Gateway to the Three Comma Club", Panel Moderator with: General Steven Butow; Col. Charles Miller Belmont; Tow Cwik, NASA JPL; Steven Isakowitz, CEO Aerospace Corp. *Air Force Space Pitch Day*, San Francisco, CA. November 6, 2019

"Failure is an option: Lessons from the Commercialization of U.S. Spaceflight", *UDIP Conference*, Oxford University, UK. Plenary Session, August 1, 2019

"Japan - U.S. Conference on Peace in Northeast Asia 2019", Panelist with former senior US, Japan, Korea diplomats and military leaders, Tokyo Japan, January 17, 2019

- "Space Force", Panel Moderator with: Doug Loverro, former Deputy Sec. Def.; Terry Virts, former NASA Astronaut; George Nield, Former FAA Ast. Admin.; Brian Weeden, Secure World Foundation. *Politicon*, Los Angeles, CA, October 12, 2018
- "Commercial Space Regulation" Panel Moderator with: Rep. Dana Rohrabacher, Dr. George Nield, Lorretta Whitesides. *International Space Development Conference*, Los Angeles, CA, May 27, 2018
- "Funding Innovation" Space Symposium, Tech Track Speech, Colorado Springs, CO, May 14, 2018
- "Space Policy in the Trump Age" *Space Technology and Investment Forum,* Plenary Session, San Francisco, CA., August 30 2017
- "Commercial Spaceflight" Heritage Foundation, Eagle Forum Collegians Summit Washington, D.C., July 19, 2017
- "The View from Beijing: Chinese Space Efforts Past, Present and Future" *Space Technology and Investment Forum*, Plenary Session, San Francisco, CA., August 2016
- "Debate on the Trans Pacific Partnership" *American Manufacturing Strategies Summit*, v. Dan Ikenson, CATO. Costa Mesa, California, November 2015. Voted debate winner by audience.
- "Overview of U.S. National Competitive Advantage in Human Orbital Spaceflight" *American Institute of Aeronautics and Astronautics (SPACE 2014)*, San Diego, California, September 2014
- "Overview of PARTS Analysis", *Emerging Space Industry Leaders Workshop*, Stanford University Department of Aeronautics and Astronautics, Stanford, California May 29-30, 2014
- "California's New Space Industry"
 Panel Moderator, *California Democratic Party Convention*, Sacramento, California, April 29, 2011

Governmental Testimony and Presentations

- "America Can Afford a Future," *Nominee (NASA CFO) Testimony to the U.S. Senate, Committee on Commerce, Science and Transportation*, Russel Senate Office Building, Washington, D.C. November 10, 2020
- "China's Endgame Strategy Leveraging US Capital and Research to Leapfrog America in Cyber, Military and Space Tech" *Congressional Defense Forum Foundation Policy Forum*, Capitol Hill, Rayburn Congressional Office Building, Washington, D.C. June 23, 2017
- "Cyber Attacks: An Unprecedented Threat to U.S. National Security" Testimony to the U.S. House of Representatives, Foreign Affairs Subcommittee on Oversight and Investigations, Washington, D.C. March 21, 2013
- "The Price of Public Diplomacy with China" *Testimony to the U.S. House of Representatives, Foreign Affairs Subcommittee on Oversight and Investigations*, Washington, D.C. March 28, 2012
- "Exposing the Cost of China's Cyber Assault Against America"

Congressional Defense Forum Foundation Policy Forum, Capitol Hill, Rayburn Congressional Office Building, Washington, D.C. September 20, 2013

"Grounding China's Reality Distortion Field", House of Commons, Ottawa, Canada, Nov. 2, 2011

Certifications

FAA Remote Pilot in Charge Certification (commercial drone operator part 107), April 2017 Microsoft MCSE (certified systems engineer), 1997 Cisco CCNA (certified network administrator), 1998 PADI Open Water and Nitrox Diver, NAUI Advanced Diver