Northern Arizona University, Economic Policy Institute 45th Economic Outlook Conference, November 12th 2020

Technology Panel Biographies



Michael A. Echols CISSP, MBA

Board Member IACI CEO Max Cybersecurity LLC

Michael A. Echols (Mike), is the author of the 2020 book *Secure Cyber Life:* The Government is Not Coming to Save You.

Mike spent 10 years in critical infrastructure protection and cybersecurity leadership at the Department of Homeland Security (DHS). He spent another 6 years as a consultant to DHS for the creation of the National Infrastructure Protection Plan, National Response Framework and Critical Capabilities List. Mike led several national security and risk management initiatives prior to departing DHS in September 2016.

At DHS, Mike was the Director of the Government Industry Planning and Management Branch. He was Chairman of the Communications Sector, Government Coordinating Council where he led a national risk assessment across wireline, wireless, cable, broadcast and satellite. He was also the Designated Federal Official for the President's NSTAC. Mike also Chaired the Network Security Information Exchange consisting of cybersecurity experts from Canada, UK, Australia, New Zealand. Mike served as the U.S. Representative to the NATO Civil Communications Policy Committee (CCPC) in Brussels. He also led classified and unclassified information sharing programs at DHS. He was the point-person for President Obama's E.O 13691, *Promoting Private Sector Information Sharing* - developing the program for ISAOs.

Mike helped to launch the International Association of Certified ISAOs at Kennedy Space Center. He is the CEO of *Max Cybersecurity*, an SBA 8a company in Washington DC. He was featured on a PBS Cybersecurity Special, *Roadtrip Nation*" and has published Forbes Online articles. Mike is currently the facilitator for the APTA Control and Communications Security Working. He helped develop coding programs for the Hispanic Heritage Foundation and is now developing "Cyber Secure Zones." A national security strategy for "Whole of Community" cybersecurity management, skills training, broadband for all and community advancement. Mike is a columnist for Homeland Security Today Magazine.



Dr. Tom Acker

Dr. Tom Acker is a Professor of Mechanical Engineering at Northern Arizona University, where he has been since 1996. He holds a Ph.D. in Mechanical Engineering from Colorado State University. His duties include teaching and performing research related to energy systems, power system modeling, renewable energy, thermodynamics, and fluid mechanics. His research in wind energy relates to and wind flow modeling for distributed wind applications, optimization of off-grid energy systems, wind turbine aerodynamics, and wind integration on the electrical system. He has worked extensively with the National

Renewable Energy Laboratory and the International Energy Agency on grid integration of wind and hydropower technologies. He is a member of the editorial board of *Wind Engineering*, serves on the board for the North American Wind Energy Academy, and is President of the board for the Western Energy Futures Institute.



Ben Rudell https://www.linkedin.com/in/benjaminruddell/

Ben is currently a Professor in and the Director of the School of Informatics, Computing, and Cyber Systems at Northern Arizona University, the President of Ruddell Environmental consulting, Chief Science Officer for Criticality Sciences Inc., and the Director of the FEWSION project. His PhD is in Civil and Environmental Engineering from the University of Illinois at Urbana-Champaign. He is a registered Professional Engineer in Arizona (Water Resources practice). His professional experience is in informatics, data science, systems engineering, and generally in the leadership of the

interdisciplinary university enterprise. His professional goals are the advancement of the science and management of complex systems, and excellence in education in a university setting. Why? Because our country and world need better solutions to handle chaos and complex problems, and we need better scientists and engineers who know how to best serve their communities with these solutions.

Keywords: FEW, Hydrology and Water Resources, Ecohydrology, Watershed Science, Coupled Natural-Human Systems, Geoscience, Citizen Science, Geostatistical Analysis, Complex Systems, Informatics, Information Theory, Data Science, Citizen Science, Data Privacy, Data Ethics, Cyberinfrastructure, GIS, Network Theory, History/Religion/Ethics in Science and Engineering, Geoscience Education, Engineering Education, Appropriate Technology, Urban Systems, Built Environment, Infrastructure, Alternative Energy, Power Systems, Water and Energy Policy, Urban Energy Use, Urban Water Use, Urban Sustainability, Ecohydrology, Hydro-Economics, Regional Climate, Urban Heat Island, Human Health and Climate, Urban Microclimate Engineering, Virtual Water, Life Cycle Analysis, Engineered Resilience, Sustainability and Resilience Assessment, Footprinting, Embedded Resource Accounting.



Steven G. Zylstra
President + CEO
Arizona Technology Council + SciTech Institute

Steven G. Zylstra serves as president and CEO of the Arizona Technology Council, a role he assumed in 2007. He is responsible for strategy, operations, finance and policy development. Zylstra is a vocal spokesman for the value technology can provide in raising social and economic standards in Arizona and was named "Leader of the Year, Technology," by the *Arizona Capitol Times*, "Most Admired Leader" by the *Phoenix Business Journal*.

Zylstra serves on numerous councils, committees and boards including the Arizona Bioscience Roadmap Steering Committee; Arizona CTE Quality Skills Commission; Arizona Department of Education - CTE Quality Skills Commission; Arizona District Export Council Board; Arizona Science Center Board of Trustees; Computing Technology Industry Association's (CompTIA) Global Trade and Market Access Committee; the UA College of Engineering Dean's Advisory Board; Life365 Advisory Board; ASU W.P. Carey School of Business Information Systems Executive Advisory Board among others.

Zylstra's most recent board appointment was to the Common Sense Arizona Advisory Council in December 2018. In addition, he serves as chairman emeritus of the Technology Councils of North America (TECNA) and is a fellow of The Aspen Institute's Communities That Work Partnership.