

Can Machine Learning Improve Tax Enforcement?

Speaker Biographies

Alex C. Engler is a Fellow in Governance Studies at The Brookings Institution, where he studies the implications of artificial intelligence and emerging data technologies on society and governance. Engler also teaches classes on data science and visualization at Georgetown's McCourt School of Public Policy, where he is an adjunct professor and affiliated scholar. From October 2021 to March 2022, Engler is on a leave of absence from Brookings as a winner of the Fulbright-Schuman Innovation Award. Most recently faculty at the University of Chicago, he ran UChicago's M.S. in Computational Analysis and Public Policy and previously he designed the M.S. in Data Science and Public Policy at Georgetown University. Over the past decade, Engler has worked as a data scientist at MDRC, the Urban Institute (where he twice won the President's Award for Innovation), and DC local government. He is also proud alumnus of Sunlight Foundation's Labs and the Congressional Research Service. Alex graduated from American University with a B.A. in economics before earning a Master of Public Policy at Georgetown University and a Master of Science in Predictive Analytics at Northwestern University.

John Guyton is an Associate Director within the Research, Applied Analytics, and Statistics division at the IRS. John has 15 years of experience managing and leading research at the IRS preceded by management and analyst experience in the national office of a Big 4 tax practice. John's research experience ranges between measurement of taxpayer compliance burdens and design of outreach treatments to statistical measurement of compliance needs and treatment responses for high-income and corporate taxpayers. John currently leads several machine learning projects for the IRS.

Janet Holtzblatt is a senior fellow at the Urban-Brookings Tax Policy Center. Her research covers a broad range of tax policy issues, with emphasis on the tax treatment of families and workers, wealth taxation, health reform, the administration of the tax code, and tax simplification. Holtzblatt has served on the board of directors for the National Tax Association. In 2017, she received the Referee of the Year Award from the National Tax Journal. She was the recipient of the 2020 Davie-Davis Public Service Award, which is bestowed annually by the National Tax Association. Before joining Urban, Holtzblatt was the unit chief for tax policy studies in the Tax Analysis Division of the Congressional Budget Office. Before that, she was deputy director of the Individual Taxation Division in the US Treasury Office of Tax Analysis and a senior analyst on the Senate Budget Committee. She earned her bachelor's degree in economics and history from the University of Illinois and a doctoral degree in economics from the University of Wisconsin.

Una-May O'Reilly is founder and leader of the AnyScale Learning For All (ALFA) group at Massachusetts Institute of Technology Computer Science and Artificial Intelligence Laboratory. ALFA focuses on Artificial Adversarial Intelligence through machine learning and evolutionary algorithm lenses. She received a best paper award in 2015 at the International Conference on Artificial Intelligence and Law for a co-authored paper entitled "Tax non-compliance detection using co-evolution of tax evasion risk and audit likelihood". She received the EvoStar Award for Outstanding Achievements in Evolutionary Computation in Europe in 2013. She was a Fellow of the International Society of Genetic and Evolutionary Computation, now ACM Sig-EVO, which transferred to special recognition for contributions. She has served as Vice-Chair of ACM SIGEVO. She is the area editor for Data Analytics and Knowledge Discovery for Genetic Programming and Evolvable Machines (Kluwer), and ACM Transactions on Evolutionary Learning and Optimization, and editor for Evolutionary Computation (MIT Press).