

COL Atin Basu Choudhary, Ph.D.
Professor

Contact Information

301 Scott Shipp Hall

540-464-7450

basua@vmi.edu

Education

Ph.D. Economics, University of Mississippi, 1998

M.B.A. Personnel Management and Industrial Relations, Xavier Labor Relations Institute, 1992

B.S. Economics, Calcutta University, 1989

Research Interests

Economics of information, conflict, cooperation, predictive analytics and machine learning, and signaling theory (Applied to the political economy of terrorism, civil conflict, and cybersecurity).

Courses Taught

EC 300 – Intermediate Microeconomics

EC 414 – Applied Game Theory

EC 415 – Political Economy of Conflict

Recent Publications

“Snatched secrets: Cybercrime and trade secrets modeling a firm's decision to report a theft of trade secrets.” (2019). Co-author: Nicola Searles. Computers and Security.

“The political economy of polytheism: The Indian versus the Graeco-Roman religions.” (2020). Co-authors: Mario Ferrero and Tim Lubin. Homo Oeconomicus.

“Validating Game-Theoretic Models of Terrorism: Insights from Machine Learning.” (2021). Co-authors: Jim Bang and Ani Mitra. Games.

“Why Is Civil Conflict Path Dependent? A Cultural Explanation” (2021). Games.

“Higher levels of Bifidobacteria and tumor necrosis factor in children with drug-resistant epilepsy are associated with anti-seizure response to the ketogenic diet.” (2022). Co-authors: Dahlin, M., Singleton, S. S., David, J. A., Wickström, R., Mazumder, R., & Prast-Nielsen, S. EBioMedicine (Part of the LANCET Discovery Science), 80, 104061.

DEPARTMENT OF ECONOMICS AND BUSINESS

VIRGINIA MILITARY INSTITUTE

“AI and Warfare: Rational Choice Approach.” (2024). Eastern Economic Journal.

Books

New Machine Learning Tools for Predicting Economic Growth. (2017) With: Jim Bang (SAU) and Tinni Sen (VMI). Springer Verlag.

Predicting Conflict: A Machine Learning Approach. (2018) With: Tinni Sen, Jim Bang, and John David. Lexington Books, an imprint of Rowman and Littlefield.

Identifying the Complex Causes of Civil War: A Machine Learning Approach. With Jim Bang, John David, and Tinni Sen. Palgrave Macmillan.

Cambridge Handbook of the Economics of Terrorism. (Forthcoming and in production). Coeditor: Gunther Schulz.

Other Publications

“Political Economy of Reconciliation: A Theoretical Primer.” With Andreas Freytag. Book chapter in edited volume “Transdisciplinary Approaches to Reconciliation: Studies in Honor of Martin Leiner.” Ed. Francesco Ferrari, Laura Villanueva, Davide Tachinni, Binyamin Gurstein. 2024. Vandenhoeck and Ruprecht Verlag.

“Using Matlab Regression Learner App to Create and Interpret Data Driven Models,” With John David. Textbook Chapter for Society for Industrial and Applied Mathematics. 2023.

“Bioinformatics and machine learning in gastrointestinal microbiome research and clinical application.” (2020) Book chapter. With Lindsay Hopson, Stephanie Singleton, John David, Stefanie Prast-Nielsen, Pavel Klein, Sabyasachi Sen, Raja Mazumder. Elsevier.

“Reducing the Impact of Ethnic Tensions on Economic Growth: Economic or Political Institutions?” (2019) With Michael Reksulak. Economic and Political Institutions and Development, edited by Joshua C. Hall and Sara Harper. New York: Springer.

Recent Invited Events/Contributions

2024, Interview on NPR With Good Reason show on how rational choice models model human AI interaction and highlight the importance of moral judgment in decision making.

DEPARTMENT OF ECONOMICS AND BUSINESS

VIRGINIA MILITARY INSTITUTE

2024, Invited to formulate guidelines for ethical AI at the AlphaPersuade Conference sponsored by UCI School of Humanities, UCI Beall Innovation Center, Institute For Humane Technology, Artificial Intelligence LA, and Stonybrook University.

2023, Invited to lead a workshop on causal machine learning as part of Kennesaw State University's Clary Series.

2023, Interview on NPR With Good Reason show on how rational choice models can help promote peaceful coexistence in a multireligious world.

2023, Invited to teach the political economy of conflict at the French Military Academy St. Cyr's social science research program (CREC).

2023, Invited to the Wargaming Initiative for NATO 2023 (WIN 23) in Rome, Italy, co-chaired by France, Italy and Germany.

2022, Invited Summer Fellow at the Freiburg Institute of Advanced Sciences, Freiburg Germany.

2022, Invited talk on a post Ukraine War Europe at Friedrich Schiller University, Jena Germany.

2021, Organized ENSA mini-conference on the "Economics of Conflict" as part of RAND/IDA/DoD series of panels.

Awards and Honors

2023, Reappointed Roberts Professor of Free Enterprise Economics.

2018, Reappointed Roberts Professor of Free Enterprise Economics.

2014, Appointed Roberts Professor of Free Enterprise Economics.

2012, Inducted into the Phi Beta Kappa academic honor society.

2012, Inducted into Omicron Delta Kappa, National Leadership Honor Society.

2012, Jackson Hope Summer Undergraduate Research Award, VMI.

2011, Finalist Citation for Outstanding Faculty Award of the State Council of Higher Education, Virginia.

2010, Matthew F. Maury Research Award.

2006, Jackson Hope Faculty Development Leave.

2006, Distinguished Teaching Award, VMI.

DEPARTMENT OF ECONOMICS AND BUSINESS
VIRGINIA MILITARY INSTITUTE

2005 Jackson Hope Summer Undergraduate Research Award, VMI.
2004, Inducted into Omicron Delta Epsilon, International Honor society in Economics.
2004 Jackson Hope Summer Undergraduate Research Award, VMI.
2003 Wilbur S. Hinman Research Award, VMI.
2002 Jackson Hope Summer Undergraduate Research Award, VMI.
2001 Thomas Jefferson Teaching Award, VMI.
1992-1998 Honors Fellowship, University of Mississippi.
1983 National Scholarship, Government of India.

.