Sam D. Buchanan

email: s.buchanan@columbia.edu
URL: sdbuchanan.com

Current position

PhD Candidate, Columbia University, New York

Education

2018–	PhD in Electrical Engineering, Columbia University
2018	MS in Electrical Engineering, Columbia University
2014	BS in Electrical Engineering, University of Kansas (with Distinction)

Publications

CONFERENCE

2021	**Sam Buchanan**, Dar Gilboa, and John Wright, *Deep Networks and the Multiple Manifold Problem.* ICLR 2021.
2019	Dar Gilboa, **Sam Buchanan**, and John Wright, *Efficient Dictionary Learning with Gradient Descent.* ICML 2019.
2018	**Sam Buchanan**, Tanbir Haque, Peter Kinget, and John Wright, *Efficient Model-Free Learning to Overcome Hardware Nonidealities in Analog-to-Information Converters.* IEEE ICASSP (2018).

Honors

2017–2021	NDSEG Fellow, US Department of Defense
2016	Tesla Scholar, Columbia Electrical Engineering Department
2014–2015	Foreign Language and Area Studies Fellow, University of Kansas Center for East Asian Studies
2013	Undergraduate Research Award, University of Kansas
2010–2014	National Merit Finalist Scholarship, University of Kansas

Teaching, service

2018, 2019	Course assistant, Sparse Representation and High-Dimensional Geometry (ELEN 6886)
2017	Organizer, Neural Networks Seminar
	Conference reviewing: CVPR 2019 (Outstanding Reviewer), NeurIPS 2020 (Top 10% Reviewers)

Affiliations

SIAM, IEEE (student member); IEEE-HKN (Gamma Iota chapter)