

MARC CANELLAS, Ph.D.

J.D. Candidate, 2021

New York University School of Law

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EDUCATION

J.D., New York University, 2021.

- Honors: Jacobson Leadership Program in Business and Law Scholar.
Cybersecurity Service Scholar.
Dean's Scholarship.
- Activities: Article Selection Editor, *N.Y.U. Review of Law and Social Change*, 2020–2021.
Teaching Assistant, *Critical Infrastructure*, Prof. Rob Silvers, Fall 2020.
Research Assistant, Prof. Erin Murphy, Summer 2020.
Founder and Vice President, Rights over Tech, 2019–present.
Federal Defender Clinic, 2019–2020.
Research Assistant, Prof. Ryan Bubb, 2019–2020.
Research Assistant, Prof. Tony Thompson, Summer 2019.

Ph.D., Aerospace Engineering, Georgia Institute of Technology, 2017.

- Honors: Best Poster Award, Max Planck Institute for Human Development, Summer
Institute on Bounded Rationality, 2016.
Graduate Student Government Mitch Keller Lifetime Achievement Award.
Campus Life and Community at Tech Scholarship.
National Science Foundation Graduate Research Fellowship.
Colonel Leslie Callahan Memorial Fellowship, 2016.
Sam Nunn Security Program Fellow, 2014-2015.
Goizueta Foundation Fellowship.
- Activities: President, Graduate Student Government, 2015-2016.
Teaching Assistant, *Flight Dynamics*, Prof. Karen Feigh, Spring 2014.

B.S. Mechanical Engineering, University of Missouri, *magna cum laude*, 2012.

- Honors: University of Missouri Unsung Hero Award.
Endorsed for the Rhodes, Marshall, and Mitchell Scholarships.
Conference Founder, Engineering Connections between Politics and Science for
the 21st Century.
Ronald E. McNair Post-Baccalaureate Achievement Program Scholar.
- Activities: Engineering Ambassador, College of Engineering.
Lead Mechanical Engineer, “TigerGen II” Hydrogen Car Team.

EMPLOYMENT

Brooklyn Defender Service, Forensic Practice Unit

Legal Intern, 2020-2021.

IEEE and National Judicial College, Electronically Stored Information (ESI) Review Protocol

Editorial Review Board, 2020–present.

IEEE-USA, Artificial Intelligence and Autonomous Systems Policy Committee

Chair, 2021–present.

Vice-Chair, 2018–2020.

At-Large Voting Member, 2016–2018.

Professor Rob Silvers

Critical Infrastructure *in* M.S. in Cybersecurity Risk and Strategy Program

New York University School of Law.

Teaching Assistant, Fall 2020.

Professor Erin Murphy

New York University School of Law.

Research Assistant, Summer 2020.

ABA, AI Legal Ethics Working Group

Chair, Controls and Oversight Committee, 2020.

Bronx Defenders, Criminal Defense Practice

Legal Intern, Summer 2020.

Professor Ryan Bubb

New York University School of Law.

Research Assistant, 2019–2020.

Federal Defenders of New York, Southern District

Legal Intern, 2019–2020.

Neighborhood Defender Service of Harlem, Family Defense Practice

Legal Intern, Summer 2019.

Professor Tony Thompson

New York University School of Law.

Research Assistant, Summer 2019.

U.S. Representative Derek Kilmer (WA-6)

United States House of Representatives.

IEEE Congressional Science and Technology Fellow, 2017–2018.

Georgia Institute of Technology, School of Aerospace Engineering, Cognitive Engineering Center

Postdoctoral Research Fellow, 2017.

Graduate Research Assistant, 2012–2017.

GRANTS

1. *Proactive Decision Support through Information Modification*
3-year Research Grant, Command Decision Making Program, Code 34, Office of Naval Research
(with Karen Feigh).

WRITING

Law Publications

- [in prep] A Love Letter from Cognitive Engineers to the Robot Lawyers.
(with Matthew J. Miller, Yosef S. Razin, and Rachel A. Haga).
- [in prep] Constitutional Rights in a Cybernetic World.
- 1. [Autonomous Systems & Domestic Security](#).
Penn State Journal of Law & International Affairs.
(with David Atkinson, Douglas Burig, and Alan Wagner)
2020.

Law Conference Publications

1. [Framing Human-Automation Governance: A New Modus Operandi from Cognitive Engineering](#).
(with Matthew Miller, Yosef Razin, Rachel Haga, Dev Minotra, and Raunak Bhattacharyya).
WeRobot.
2017.

Scientific Publications in Peer-Reviewed Journals

- [In Prep] Humans and Robots: Turning antagonists into teammates.
Marc Canellas, Matthew J. Miller, Yosef S. Razin, and Rachel A. Haga.
- [Submitted] Impact of Missing Information and Strategy on Decision Making Performance.
Will Sealy, Marc Canellas, and Karen Feigh.
- [Submitted] A General Linear Model of Judgment and Decision Making.
Marc Canellas, Sarah Walsh, Karen Feigh, and Rachel Haga
- 7. [In Press] Smart Personalization by Algorithm? Some Critical Input from the Decision Sciences.
AI Magazine
Konstantinos Katsikopoulos and Marc Canellas
- 6. [In Press] Defending IEEE Software Standards in Federal Criminal Court.
IEEE Computer
Spring 2021.
Marc Canellas

5. [Unsafe at Any Level: U.S. NHTSA’s levels of automation are a liability for autonomous vehicle design and regulation.](#)
Marc Canellas and Rachel Haga.
Communications of the ACM.
March 2020.
4. [Heuristic Information Acquisition and Restriction for Decision Support.](#)
Marc Canellas and Karen Feigh.
IEEE Transactions on Human-Machine Systems.
2017.
3. [Toward Simple Representative Mathematical Models of Naturalistic Decision Making through Fast-and-Frugal Heuristics.](#)
Marc Canellas and Karen Feigh.
Journal of Cognitive Engineering and Decision Making.
2016.
2. [Lost in Translation: Building a Common Language for Regulating Autonomous Weapons.](#)
Marc Canellas and Rachel Haga.
IEEE Technology and Society Magazine.
2016.
1. [Accuracy and Effort of Decision-Making Strategies with Incomplete Information: Implications for Decision Support System Design.](#)
Marc Canellas, Karen Feigh, and Zarrin Chua.
IEEE Transactions on Human-Machine Systems.
2015.

Scientific Publications in Peer-Reviewed Conferences

3. [Toward Meaningful Human Control of Autonomous Weapons Systems through Function Allocation.](#)
Marc Canellas and Rachel Haga.
IEEE International Symposium on Technology and Society (ISTAS).
2015.
2. [Heuristic decision making with incomplete information: Conditions for ecological rationality.](#)
Marc Canellas and Karen Feigh.
IEEE International Conference on Systems, Man and Cybernetics (SMC).
2014.
1. [Accuracy and effort of decision making strategies with incomplete information.](#)
Marc Canellas, Karen Feigh, and Zarrin Chua.
IEEE International Inter-Disciplinary Conference on Cognitive Methods in Situation Awareness and Decision Support (CogSIMA).
2014.

Essays, Op-Eds, Public Writing

4. [A Post-Election Trump Firing Makes the Case for an Independent, Regulatory CISA](#)
Just Security.
December 1, 2020.
3. [A Once-in-a-Lifetime Opportunity: IEEE-USA Government Fellowships](#)
IEEE-USA Insights.
July 15, 2020.
2. [Voting Machines Must Become More Usable: Lots of Voting Machines Are Really Confusing, and on Election Day, It Showed.](#)
Slate.
November 20, 2018.
1. [Was Your Voting Machine Hacked? Without More User-Friendly Devices, We May Not Know.](#)
Just Security.
November 16, 2018.

Reports, Testimonies, and Public Letters

4. [Artificial Intelligence: Accelerating Inclusive Innovation by Building Trust](#)
IEEE-USA Position Statement.
(with IEEE-USA Artificial Intelligence and Autonomous Systems Policy Committee).
July 2020.
3. [Testimony re: “Oversight - Follow up on Local Law 49 of 2018 in Relation to Automated Decision Systems Used by Agencies” \[Video\]](#)
Written Testimony.
New York City Council, Committee on Technology
New York, NY, 2020.
2. [Recommendations to the New York City Automated Decision Systems Task Force](#)
Open Letter.
(with coalition of technical and civil rights experts, advocates, and community members).
August 17, 2018.
1. [Artificial Intelligence Research, Development and Regulation](#)
IEEE-USA Position Statement.
(with IEEE-USA Ad-Hoc Artificial Intelligence Policy Committee).
February 10, 2017.

PRESENTATIONS

25. “Capturing Societal Benefits while Addressing Ethical Concerns of Autonomous Last Mile Delivery”
Panelist.
Science and Technology Forum and Exposition 2021 (SciTech 2021)

- American Institute for Aeronautics and Astronautics (AIAA)
January, 2021.
24. [“The search for the Unicorn: Is there such a thing as a unified, values-driven, evidence-based AI governance framework?”](#)
Moderator
The Athens Roundtable on Artificial Intelligence and the Rule of Law
IEEE Standards Association, The Future Society, and ELONtech
November 17, 2020.
 23. [“COVID-19 Contact Tracing Apps: Privacy and Public Health in the Coronavirus Age”](#)
Moderator.
NYU Rights over Tech.
May 1, 2020.
 22. [“AI Law: The Basics”](#) (CLE credit event)
Panelist.
Artificial Intelligence Law 2020.
Practising Law Institute.
New York, NY, January 27, 2020.
 21. [Testimony re: “Oversight - Follow up on Local Law 49 of 2018 in Relation to Automated Decision Systems Used by Agencies” \[Video\]](#)
New York City Council, Committee on Technology
New York, NY, January 22, 2020.
 20. “Pre-Trial Detention/Risk Assessment”
Session Leader.
Automating Bias: How Computers Are Making Decisions About Your Life.
NAACP LDF and Co-Partners.
New York, NY, 2019.
 19. [“Seven Questions to Ask When Faced with an Algorithm”](#) (CLE credit event)
Presenter.
Primer on AI.
Rights over Tech with the NYU Center on Civil Justice.
New York, NY, November 22, 2019.
 18. [“Law & Tech”](#)
Panelist.
All Tech is Human NYC.
All Tech is Human.
New York, NY, November 9, 2019.
 17. “Lessons from the Hill”
Panelist.
NYU Journal of Legislation and Public Policy.
New York, NY, October 16, 2019.
 16. “Impact of Innovation” (CLE Credit Event)

Moderator.
NYU Law & Tech.
New York, NY, October 15, 2019.

15. “Automation, Robotics, Artificial Intelligence and the Future of Work”
Panelist.
60th Constitutional Convention.
Texas AFL-CIO.
San Antonio, TX, July 27, 2019.
14. “A Golden Age of Legal Innovation: Navigational Advice for Law Students, Young Lawyers, and Other Explorers” (CLE Credit Event)
Panelist.
NYU Law & Tech.
New York, NY, April 8, 2019.
13. “[Autonomous Systems and Domestic Security](#)”
Panelist.
Security and the Autonomous Future.
Pennsylvania State University Center for Security Research and Education and Pennsylvania State Journal of Law and International Affairs.
University Park, PA, April 5, 2019.
12. Framing Human-Automation Governance: A New Modus Operandi from Cognitive Engineering
Panelist.
(with Matthew Miller, Yosef Razin, Rachel Haga, Dev Minotra, and Raunak Bhattacharyya).
WeRobot 2017.
Yale Law School.
New Haven, CT, April 1, 2017.
11. Mathematical Representations of Human Judgment and Decision Making in Military Contexts
(with Karen Feigh and Rachel Haga).
Emerging Techniques Special Meeting.
Military Operations Research Society.
Washington, D.C., December 2016.
10. A General Linear Model of Fast-and-Frugal Judgment and Decision Making
Poster Presentation.
Summer Institute on Bounded Rationality.
Max Planck Institute for Human Development.
Berlin, Germany, July 2016.
9. “The Necessary and Sufficient Conditions for Graduate School Success.”
Invited speaker.
2016 FOCUS Program Dinner.
Georgia Institute of Technology.

Atlanta, GA, January 2016.

8. Toward Meaningful Human Control of Autonomous Weapons Systems through Function Allocation.
Presenter.
(with Rachel A. Haga).
IEEE International Symposium on Technology and Society (ISTAS).
Dublin, Ireland, November 2015.
7. Heuristic Decision Making with Incomplete Information: Conditions for Ecological Rationality.
IEEE Systems, Man, and Cybernetics International Conference (SMC).
(with Karen Feigh).
San Diego, CA, November 2015.
6. Accuracy and Effort of Decision Making with Incomplete Information.
IEEE International Inter-Disciplinary Conference on Cognitive Methods in Situation Awareness and Decision Support (CogSIMA).
(with Karen Feigh and Zarrin K. Chua).
San Antonio, TX, March 2014.
5. “Building Your Morals.”
Keynote Speaker.
Show-Me Scholars Luncheon.
University of Missouri, Columbia, MO, 2014.
4. Accuracy and Effort of Dynamic Decision Making with Incomplete Information.
Brown Bag Lunch Lecture Series.
Georgia Institute of Technology, School of Aerospace Engineering, Atlanta, GA, October 2013.
3. Review and Development of Planetocentric Reference Frames to Model the Flyby Anomaly.
McNair Scholars Conference.
(with Sergei Kopeikin).
University of Missouri, Columbia, MO, April 2012.
2. “Mastering the Fellowships Game.”
MU Excels 2012.
University of Missouri, Columbia, MO, 2012.
1. At Wheel Stop: A Review of the U.S. Human Space Exploration Policy.
Review of the 2011 Washington Internships for Students of Engineering (WISE) Program.
Washington, D.C., August 2011.

TEACHING

Teaching Assistant, Aerospace Engineering 3721, “Flight Dynamics,” Georgia Institute of Technology,
Spring 2014

PROFESSIONAL ACTIVITIES

Reviewer

- *Behavior Research Methods*
- *IEEE Access*
- *IEEE Computer*
- *IEEE Transactions on Automation Science and Engineering*
- *IEEE Transactions on Human-Machine Systems*

Member

- Institute for Electrical and Electronics Engineers (2014-present)
- American Bar Association (2015-present)
- National Association of Criminal Defense Lawyers (2019-present)

Committee Member

- ABA AI Legal Ethics Working Group (2020)
- Standard P7000 Model Process for Addressing Ethical Concerns During System Design, IEEE Standards Association (2016-2017)

Open Source Elections Technology (OSET) Institute

- Contributing Election Technology and Policy Analyst

FEATURED

7. "[Leading Edge](#)," in *NYU Law School's Annual Magazine* (September 2019).
6. "[Security center explores the 'Autonomous Future' through interdisciplinary lens](#)" in *Penn State News* (August 2019).
5. "[2017-2018 Government Fellowships: A Formative Experience](#)," in *IEEE-USA InSight Magazine* (October 2018).
4. "[US House White Paper Calls for AI Development, Restraint in Federal Regulations](#)," in *LegalTech News* (October 2018).
3. "[Encouraging Transparency and Accountability, Advocates Push Governments to Confront Machine Bias](#)," in *LegalTech News* (August 2018).
2. "[Tech in DC: Intersecting Science and Policy](#)," in *Georgia Tech News Center* (August 2017).
1. "[When Cognitive Engineering Meets Public Policy](#)," in *Georgia Tech News Center* (July 2017).