



Tyler Lance Jaynes

West Valley City, UT, USA 84120

E-mail: tyler.l.jaynes@gmail.com

LinkedIn: <https://www.linkedin.com/in/tyler-jaynes-philosopher/>

ORCID: <https://orcid.org/0000-0001-5849-1605>

Awards & Honors

Award of Oral Presentation

18th Asian Bioethics Conference, Seoul, KR; October 27th, 2017

- Awarded by the conference organizers for “On Nanotechnology: Overcoming the Limitations of fMRI Research.”

Certificate of Contribution

2019 International Mountain Day, Orem, UT; December 11th, 2019

- Awarded by the Food & Agriculture Organization of the United Nations to recognize contributions to the 68th United Nations Civil Society Conference in Salt Lake City, UT, US

Emerging Tech Grant

IEEE Computer Society, Piscataway, NJ, US; April 5th, 2023

- Minor award to establish a quantum technologies workshop (to be scheduled)

Bursary Award

The Royal Society Neural Interfaces Summit, London, UK; August 11, 2023

- Awarded by the Royal Society to engage in a two-day summit (held September 12th and 13th, 2023) focused on current innovations in neural interface development and application, and exploring the regulation required for these artifacts

Other Professional Activities

- Peer-reviewer (i.e., *AI & Society*, *Journal of Bioethical Inquiry*).
- Collaborator for a 2020 Japan Society for the Promotion of Science grant project.
- Institute of Electrical & Electronics Engineers member (2019 – present).
- Sole student organizer of the 11th G. Lawrence Anderson Undergraduate Philosophy Conference, hosted by Utah Valley University April 13, 2018.
- Steering Committee Member, “Innovation Frontiers 2021” joint conference between the Society for HealthCare Innovation and the University of California – Santa Cruz, Crown College
- Steering Committee Member, “Innovation Frontiers 2022” joint conference between the Society for HealthCare Innovation and the University of California – Santa Cruz, Crown College
- Conference Organizing Committee Member, 2024 IEEE Nanomaterials and Devices Conference (NMDC), Salt Lake City, UT, US
- Project contributor, IEEE SA Quantum Standards Roadmap (under development).

Volunteer Positions

Secretary

IEEE P2863™ – Recommended Practice for Organizational Governance of Artificial Intelligence – Standard Development Group, Virtual; August 2020 – Present

- Pro-bono / unpaid position; approximately 10 hours weekly.
- Coordinate meetings for Working Group and Subgroup activities.
- Facilitate document management for Recommended Practice draft contributions.
- Draft meeting minutes and agendas.
- Maintain participant roster and voting membership.
- Technically contribute to Working Group and Subgroup meetings, and development of Recommended Practice draft.

Chair

IEEE Nanotechnology Council Standards Committee, Virtual; November 2020 – Present

- Pro-bono / unpaid position; approximately 10 hours weekly.
- Serve as a non-voting member of the IEEE Nanotechnology Council Administrative Committee, reporting on Standards Committee activities.
- Coordinate and lead meetings to discuss new opportunities for industrial standard development.
- Help to ensure that IEEE SA participation policies are being followed during Committee meetings.
- Conduct research to verify state of the industry, including through conference participation.
- Report on Committee activities to IEC/TC 113 – Nanotechnology for electrotechnical products and systems
- Coordinate with project submitters to present project authorization requests to IEEE SA.
- Process industrial standard renewals or withdrawals.

Vice-Chair

IEEE P7030™ – Recommended Practice for Ethical Assessment of Extended Reality (XR) Technologies, Virtual; February 2022 – Present

- Pro-bono / unpaid position; approximately 5 hours weekly.
- Lead Working Group activities in lieu of Chair when not present or recusing themselves to engage in technical discussions.
- Technically contribute to Working Group meetings and development of Recommended Practice draft.
- Help to ensure that IEEE SA participation policies are being followed during Working Group meetings.

Education

Associate of Science, with Honors, University Studies

Utah Valley University, University College, Orem, UT, US; Graduated May 2nd, 2014

- Academic emphases in biotechnology, general medicine, and psychology
- Attained alongside high school diploma from the Utah County Academic of Sciences in Orem, UT, US, graduated with high honors

Bachelor of Science, Philosophy; Minor in Ethics

Utah Valley University, College of Humanities and Social Sciences, Orem, UT, US; Graduated May 4th, 2018

- Academic emphases in bioethics, medical ethics, and technology ethics
- Completed on-campus internship in the UVU Center for the Study of Ethics

Master of Science, Bioethics

Alden March Bioethics Institute at Albany Medical College, Albany, NY, US; Not completed

- Academic emphases in medical law, neuroethics, and medical technology management
- Online-only program

Master of Legal Studies

University of Utah, S.J. Quinney College of Law, Salt Lake City, UT, US; Anticipated August 20th, 2024

Publications

Legal Personhood for Artificial Intelligence: Citizenship as the Exception to the Rule

- *AI & Society* 35, no. 2 (2020): 343-354. <https://doi.org/10.1007/s00146-019-00897-9>

From Specialized to Hyper-Specialized Labour: Future Labor Markets as Helmed by Advanced Computer Intelligence

- In *Loneliness and the Crisis of Work*, edited by Pritika Nehra. Newcastle upon Tyne, UK: Cambridge Scholars Publishing (2021), pp. 159-175

The Question of Algorithmic Personhood and Being (Or: On the Tenuous Nature of Human Status and Humanity Tests in Virtual Spaces—Why All Souls are ‘Necessarily’ Equal When Considered as Energy)

- *J4*, no. 3 (2021): 452-475. <https://doi.org/10.3390/j4030035>

On Human Genome Manipulation and *Homo technicus*: The Legal Treatment of Non-Natural Human Subjects

- *AI and Ethics* 1, no. 3 (2021): 331-345. <https://doi.org/10.1007/s43681-021-00044-5>

The Legal Ambiguity of Advanced Assistive Bionic Prosthetics: Where to Define the Limits of ‘Enhanced Persons’ in Medical Treatment

- *Clinical Ethics* 16, no. 3 (2021): 171-182. <https://doi.org/10.1177/1477750921994277>

Citizenship as the Exception to the Rule: An Addendum

- *AI & Society* 36, no. 3 (2021): 911-930. <https://doi.org/10.1007/s00146-020-01105-9>

“I Am Not Your Robot:” The Metaphysical Challenge of Humanity’s AIS Ownership

- *AI & Society* 37, no. 4 (2022): 1689 - 1702. <https://doi.org/10.1007/s00146-021-01266-1>

“Compoundless Anaesthesia,” Controlled Administration, and Post-Operative Recovery Acceleration: Musings on Theoretical Nanomedicine Applications

- *Journal of Clinical Medicine* 11, no. 1 (2022): 256 (16 pg.). <https://doi.org/10.3390/jcm11010256>

Problems of Using Autonomous Military AI Against the Background of Russia's Military Aggression Against Ukraine

- *Baltic Journal of Legal and Social Sciences (Juridisko un Sociālo Zinātņu Baltijas Žurnāls)* 2022, no. 4 (2023): 131-145. <https://doi.org/10.30525/2592-8813-2022-4-16>
- Co-authors: Oleksii Kostenko, Ph.D.; Dmytro Zhuravlov, J.D.; Oleksii Dniprov, J.D.; and Yana Usenko

Socially Good AI Contributions for the Implementation of Sustainable Development in Mountain Communities Through an Inclusive Student Engaged Learning Model

- In *Socially Good AI: Artificial Intelligence for the Sustainable Development Goals*, eds. Francesca Mazzi and Luciano Floridi. Cham, CH: Springer Nature Switzerland (2023), pp. 269-289. https://doi.org/10.1007/978-3-031-21147-8_15
- Co-authors: Baktybek Abdrisaev, B.Sc., Ph.D.; Linda MacDonald Glenn, J.D., LL.M

Practical Extended Reality Technologies: Global Voices on Deployment and Regulation

- Forthcoming edited collection from CRC Press (Taylor & Francis Group)
- Co-editors: Lauren O. Ruffin, B.A., J.D.; Gregory S. Yanke, J.D., M.Sc., M.L.A., LL.M.

Presentations

Reshaping fMRI Research: How Anime Can be Used to Stimulate Medical Advancement

UNESCO Chair in Bioethics (Haifa) 12th World Conference on Bioethics, Medical Ethics & Health Law, Limassol, CY; March 23rd, 2017

Medicating the End of Human Life: The Complications of End-of-Life Care, Euthanasia, and Individual Will

Utah Valley University Contours of Knowledge Conference, Orem, UT, US; March 28th, 2017

- Co-presented with Melvin Davila Martinez

On Nanotechnology: Overcoming the Limitations of fMRI Research

Mind & Brain Conference, Flint, MI, US; September 15th, 2017

18th Asian Bioethics Conference, Seoul, KR; October 25th, 2017

Developing Anticipatory Bioethics Through Media Influences

19th International Conference on Ethics Across the Curriculum, Grand Rapids, MI, US; October 5th, 2017 (oral)

18th Asian Bioethics Conference, Seoul, KR; October 25th, 2017 (poster)

Entertainment Media and Bioethics: An Anticipatory Dialogue

New Media: Interactions and Translations Conference, El Jadida, MA; November 23rd, 2017

Generating Precedence for Absolutely Universal Rights: Energy as a Foundation for Protections

2018 Utah Valley University Student Ethics Symposium, Orem, UT, US; April 17th, 2018

Energy as a Universal Right: Applications for Artificial & Biological Beings

Brain-based & Artificial Intelligence: Socio-ethical Conversations in Computing & Neurotechnology Workshop, Chicago, IL, US; May 11th, 2018

Current Aspects of the Rights for Artificial Intelligence Debate: Perspectives from the 1990s to the Present
15th National Congress on Bioethics, Lisbon, PT; May 25th, 2018

- Presented with sponsorship from the conference organizers at the request of the organizing President, Dr. Rui Nunes

Science Fiction Turned Fact (Again): Speculative Bioethical Discourse as a Necessary Tool for Future Engagements

13th International Public Health & Bioethics Ambassador Conference, Virtual; January 6th, 2021

Beyond the IRB: TERBo™ Powered Guidance

30th Annual Association for Practical and Professional Ethics Conference, Virtual; February 25th – 28th, 2021

- “Flash” presentation; not scheduled concurrently in program
- Co-presented with W. Parker Nolen, M.B.A., C.I.P., D.P.S.; and Linda MacDonald Glenn, J.D., LL.M

The Question of Algorithmic Personhood and Being: Measuring the Digital World to Secure Future Inalienable Rights

2nd Artificial Intelligence for Information Accessibility (AI4IA) Conference, Virtual; September 28th, 2021

Smart Cities Through the Lens of Human Rights: Technological and Ethical Dilemmas

2021 IEEE International Symposium on Technology and Society (ISTAS21), Virtual; October 31st, 2021

- Panel comprised of: Bryant Walker Smith, B.Sc., J.D., LL.M. (keynote presenter); Cordel Green, B.A., M.B.A., LL.B., LL.M. (keynote presenter); myself (keynote presenter); Lubna Dajani, B.B.A. (keynote presenter); Angelo Ferraro, B.S.C.E., B.S.E.E., M.Eng.E.E. (panelist); Larissa Paredes Muse, B.Sc., M.U.E. (panelist); Rosaldo J.F. Rossetti, M.C.S., Ph.D. (panelist); and Sara M.C.M.O. Paiva, Ph.D. (panelist)

Birds of a Feather Presentation – Quantum Standards

2022 IEEE International Conference on Quantum Computing and Engineering – QCE22, Broomfield, CO, US; September 19, 2022

- Co-presented with Terrill Frantz, M.Sc., Ph.D.

Bio-Virtual Ethics for Accelerating Globalization

19th International Scientific Conference of the International Society for Clinical Bioethics, Okayama, JP; November 11, 2022\

Panel – Quantum Standards: Progress, Plans, Challenges

2023 IEEE International Conference on Quantum Computing and Engineering – QCE23, Bellevue, WA, US; September 21, 2023

- Panel comprised of: Srikanth Chandrasekaran, B.Sc. (co-moderator); Bruce Kraemer, B.Sc., M.Sc. (co-moderator); Thomas (Tom) Lubinski (panelist); Clare Allocca, B.Sc., M.Sc. (panelist); Catherine Lefebvre, B.Sc., M.Sc., Ph.D. (panelist); Blaise Vignon, M.Sc., M.B.A. (panelist); myself (panelist); and Nathan Langford, B.A., B.Sc., Ph.D. (panelist)