

Daniel Ari Friedman, PhD

Computational biologist, Active Inference researcher, cognitive security researcher, educator, and artist | California, USA, Earth

Verify	resume/verify.html QR target, public hashes, source files, and artifact sizes.
Source	manifest sha256 dab173b140e773fd resume/source.json + canonical data exports
Output	json sha256 a002974d4f867958 data/resume.json resume/resume.pdf



Curated Works 124 data/works.json	Software Rows 82 data/software.json	Scholar Metrics 764 Scholar profile	Resume Records 119 verify page
Source Hash dab173b140e7 source manifest	JSON Hash a002974d4f86 data/resume.json	PDF Hash verify page resume/verify.html	Footer QR every page resume/verify.html

Source-to-Output Flow

Inputs	Generated JSON	Public PDF + Verification
resume/source.json data/works.json data/software.json source sha256 dab173b140e773fd	data/resume.json 173,877 bytes json sha256 a002974d4f867958	resume/resume.pdf resume/verify.html PDF hash posted on verification page

Section Counts

Education	4
Experience	16
Awards	12
Conferences	17
Media / Outreach	29
Service	27
Art Uses	14



Daniel Ari Friedman, PhD

Computational biologist, Active Inference researcher, cognitive security researcher, educator, and artist | California, USA, Earth

Email danielarifriedman@gmail.com ; daniel@activeinference.institute	Sites https://danielarifriedman.com/ ; https://cognitivesecurity.us
GitHub https://github.com/docxology	LinkedIn https://www.linkedin.com/in/danielarifriedman/
Scholar https://scholar.google.com/citations?user=DXjPFtYAAAAJ	ORCID 0000-0001-6232-9096
Keybase / ENS docxology / docxology.eth	Art https://www.flickr.com/photos/daniel_friedman/

Curated Works 124 from data/works.json	Software Rows 82 50 owned + 32 All	Scholar Citations 764 h 15 / i10 17 as of 2026-05-16
--	--	--

Variant: full. Generated: 2026-05-27T22:18:54Z. Current public metrics: 124 curated works; 82 catalogued software repositories (50 owned + 32 All); 764 Google Scholar citations, h-index 15, i10-index 17 as of 2026-05-16.

Summary

Multidisciplinary researcher and open-source builder working across social insect biology, Active Inference, cognitive security, computational frameworks, education, and art.

Education (4)

2019-2023 Postdoctoral Fellow | University of California, Davis | Davis, CA, USA

- Co-mentors: Prof. Brian Johnson (UC Davis) and Prof. Tim Linksvayer (Arizona State University).
- NSF Postdoctoral Research Fellowship in Biology (PRFB), award DBI-2010290; NSF budget period 2020-2022 with affiliation extending to 2023.
- Genomics, epigenomics, transcriptomics, and behavior in eusocial insects, mainly ants and bees.
- Science research, mentoring, participation, service, and organizing events and communities online.

Source: NSF DBI-2010290 <https://grantome.com/grant/NSF/DBI-2010290> | UC Davis <https://www.ucdavis.edu/>

2014-2019 PhD | Stanford University | Stanford, CA, USA

- Advisor: Professor Deborah M. Gordon, Biology.
- Research, teaching, service, and coursework from Summer 2014 to Summer 2019.
- Thesis topics: ant ecology, collective behavior, brain gene expression, and neurometabolism.
- Stanford Graduate Fellow (Urbanek Family Fellowship), 2014-2017.
- Co-organizer of the Stanford Complexity Group, 2016-2019.
- Stanford Neuroscience NeuroChoice Grant for neurometabolism in ants, 2019, \$25,000.
- Stanford Systems Biology Seed Grant for gene expression and behavior in ants, 2018, \$25,000.
- Theodore Roosevelt Memorial Award, American Museum of Natural History, 2016, \$2,500.
- Lewis and Clark Fund grant, American Philosophical Society, 2016, \$4,000.
- NSF GRFP Honorable Mention, 2015 and 2016.

Source: Stanford dissertation <http://purl.stanford.edu/pb813wm1484>



2010-2014 BSc in Genetics | University of California, Davis | Davis, CA, USA

- BSc in Genetics, University of California, Davis.
- Genetics Department Citation, Highest Honors, 2014; 3.74 GPA overall.
- Campus Community Service Silver Award, 2014.
- Stanley and Jacqueline Schilling Award for Service, 2014.
- Completed the Population Biology Graduate Group one-year base PhD curriculum, 2013.
- Co-founder of The Aggie Transcript, an undergraduate biology journal, 2014.
- Victoria Finnerty Award for Research in Drosophila, 2013.
- Elected member of Phi Beta Kappa, UC Davis Chapter, 2014.
- Co-organizer of the Chess Club at UC Davis, 2012-2014.
- Research Scholars Program in Insect Biology, 2011-2014.
- Provost's Undergraduate Fellowship for Drosophila research, 2011, \$2,500.

Source: UC Davis <https://www.ucdavis.edu/>

2006-2010 High School | Crystal Springs Uplands School | Hillsborough, CA, USA

- Crystal Springs Uplands School.

Source: Crystal Springs Uplands School <https://www.crystal.org/>

Experience (16)

2026-ongoing Del Norte Triplicate | Typographical Editor

Community Organization

- Typographical editing for The Triplicate newspaper of Del Norte County and Crescent City.

Source: The Triplicate <https://www.triplicate.com/>

2021-ongoing Active Inference Institute | Co-founder, Participant, Officer, President, Treasurer

Community Organization

- Co-founded the Active Inference Institute; current President and Treasurer.

Source: All officers <https://www.activeinference.institute/officers> | All <https://activeinference.org/>

2019-2024 Complexity Adventures | Co-founder, Facilitator, Participant, Organizer

Community Organization

- Organized activities and community around learning and applying complexity science.

Source: Complexity Adventures profile <https://www.complexityadventures.com/organizers/2>

2019-ongoing COGSEC | Researcher

Community Organization

- Research facilitation and participation on initiatives related to cognitive security.

Source: COGSEC <https://www.cogsec.org/>

2014-2019 Stanford Complexity Group | Organizer, Participant

Community Organization

- Organized the Stanford Complexity Group while it was active.

Source: Stanford <https://www.stanford.edu/> | verification <https://danielarifriedman.com/resume/verify.html>

2025-2026 Stealth Startup | Operator

Startup

- Systems modeling and related work to be public later.

Source: verification <https://danielarifriedman.com/resume/verify.html>

2023-2024 Stealth Startup | Co-founder, Operator

Startup

- Stealth Active Inference startup.

Source: verification <https://danielarifriedman.com/resume/verify.html>



2019-2023 Remotor | Co-founder, Researcher

Startup

- Education, online event planning, and consulting for remote teams.

Source: verification <https://danielarifriedman.com/resume/verify.html>

2017-2019 fm.analytics | Co-founder, Researcher

Startup

- Predictive analytics and dashboard visualizations with Prof. Glenn Magerman at KU Leuven.

Source: verification <https://danielarifriedman.com/resume/verify.html>

2017-2019 Cryptoptera | Co-founder, Researcher

Startup

- Three-person cryptocurrency research group.

Source: verification <https://danielarifriedman.com/resume/verify.html>

2019-2023 Johnson Lab / Linksvayer Lab | Mentor, Researcher

Research

- Postdoctoral position during NSF fellowship with Brian Johnson at UC Davis and Tim Linksvayer at Arizona State University.

Source: Johnson Lab <https://johnsonlab.ucdavis.edu/> | UC Davis <https://www.ucdavis.edu/>

2014-2019 Gordon Lab | Mentor, Researcher

Research

- Graduate research, field work, wet lab, bioinformatics, and mentoring of high schoolers, undergraduates, graduate students, and non-academics.

Source: Gordon Lab <https://web.stanford.edu/~dmgordon/>

2010-2014 Kopp Lab | Researcher

Research

- Undergraduate research assistant with Prof. Artyom Kopp in Ecology and Evolution at UC Davis, studying non-coding DNA elements in the evolution of the Drosophila foreleg sex comb.

Source: UC Davis Biology <https://biology.ucdavis.edu/>

2014-2019 Pedicab People Movers | Operator

Pedicab

- Operated a pedicab/rickshaw at events including music festivals in California and downtown areas in Davis and San Jose.

Source: verification <https://danielarifriedman.com/resume/verify.html>

2015-2016 Stanford University | Teacher, Organizer, Graduate Teaching Assistant

Teaching

- Graduate Teaching Assistant for undergraduate and graduate courses: General Biology: Cell and Molecular Biology (2015) and Ethics of Evolutionary Biology (2016).

Source: Stanford Biology <https://biology.stanford.edu/>

2014 UC Davis | Teacher, Organizer, Course Co-developer

Teaching

- Student teacher and developmental biology course co-developer with Prof. Susan Keen at UC Davis.

Source: UC Davis Biology <https://biology.ucdavis.edu/>

Awards and Fellowships (12)

Year	Award	Details
2020	NSF Postdoctoral Research Fellowship in Biology	Award DBI-2010290; NSF budget period 2020-2022.
	Source: NSF DBI-2010290 https://grantome.com/grant/NSF/DBI-2010290	



Year	Award	Details
2014	Stanford Graduate Fellow, Urbanek Family Fellowship Source: Stanford Graduate Fellowship https://vpqe.stanford.edu/fellowships-funding/sqf	Stanford University, 2014-2017.
2019	Stanford Neuroscience NeuroChoice Grant Source: Stanford Neurosciences Institute https://neuroscience.stanford.edu/	Neurometabolism in ants, \$25,000.
2018	Stanford Systems Biology Seed Grant Source: Stanford Systems Biology https://sysbio.stanford.edu/	Gene expression and behavior in ants, \$25,000.
2016	Theodore Roosevelt Memorial Award Source: AMNH Theodore Roosevelt Grants https://www.amnh.org/research/richard-gilder-graduate-school/academics-and-research/fellowships-and-grants/theodore-roosevelt-memorial-grants	American Museum of Natural History, \$2,500.
2016	Lewis and Clark Fund grant Source: APS Lewis and Clark Fund https://www.amp-hilsoc.org/grants/lewis-and-clark-fund-exploration-and-field-research	American Philosophical Society, \$4,000.
2015	NSF GRFP Honorable Mention Source: NSF GRFP https://www.nsfgrfp.org/	Honorable Mention in 2015 and 2016.
2014	UC Davis Genetics Department Citation Source: UC Davis Genetics https://genetics.ucdavis.edu/	Highest Honors.
2014	UC Davis service awards Source: UC Davis https://www.ucdavis.edu/	Campus Community Service Silver Award and Stanley and Jacqueline Schilling Award for Service.
2013	Victoria Finnerty Award for Research in Drosophila Source: UC Davis Genetics https://genetics.ucdavis.edu/	UC Davis.
2014	Phi Beta Kappa Source: Phi Beta Kappa https://www.pbk.org/	Elected member, UC Davis Chapter.
2011	Provost's Undergraduate Fellowship Source: UC Davis Undergraduate Research Center https://urc.ucdavis.edu/puf	Drosophila research, \$2,500.



Works and Publications (124)

#	Year	Type	Title and Venue	Link
001	2026	Paper	A template/ approach to Reproducible Generative Research: Architecture and Ergonomics from Configuration through Publication Zenodo	10.5281/zenodo.19139090
002	2026	Series	Active Inference Journal — 500+ videos on Active Inference with transcripts YouTube	https://video.activeinference.institute/
003	2026	Paper	Before Pragmatism Had a Name: Blake's "America A Prophecy" Anticipates American Anticipatory Epistemology Zenodo	10.5281/zenodo.18807970
004	2026	Paper	The Golden Compass and the Lunar Flux: William Blake, Bimetallic Meta-stability, and the Architecture of Value Zenodo	10.5281/zenodo.19335196
005	2026	Paper	Cognitive Integrity Framework: Formal Foundations for Multiagent Security (Part 1: Theory) Zenodo	10.5281/zenodo.18364119
006	2026	Series	Personal YouTube — 200+ livestreams: drawings, Synergetics, paper discussions YouTube	https://www.youtube.com/@danielarifriedman/playlists
007	2026	Paper	The Doors of Perception are the Threshold of Prediction: Active Inference and William Blake's Theory of Seeing Zenodo	10.5281/zenodo.18600041
008	2025	Presentation	5th Applied Active Inference Symposium — Abstract Book Presentation	10.5281/zenodo.17555266
009	2025	Paper	Adaptive Basic Income (AuBI): Integrating AI, Decentralized Infrastructure, and Active Inference Zenodo	10.5281/zenodo.17228945
010	2025	Paper	CEREBRUM: Case-Enabled Reasoning Engine with Bayesian Representations for Unified Modeling Zenodo	10.5281/zenodo.15170907
011	2025	Paper	Computational Complexity and Energetics of the Ant Stack Zenodo	10.5281/zenodo.17238736
012	2025	Paper	EvoJump: Stochastic Modeling of Evolutionary Ontogenetic Trajectories Zenodo	10.5281/zenodo.17229924
013	2025	Paper	Increasing the Accessibility and Applicability of Active Inference Zenodo	10.5281/zenodo.15061667
014	2025	Paper	MDKV: A Multitrack Markdown Container for Structured, Portable Documents Zenodo	10.5281/zenodo.16790554
015	2025	Paper	Markdown Decision Process: A Framework for Probabilistic Document Analysis Zenodo	10.5281/zenodo.17244386
016	2025	Paper	On Cognitive Art & Science: Toward Wholeness From Both Sides Zenodo	10.5281/zenodo.16740439
017	2025	Paper	On Time Zenodo	10.5281/zenodo.15168381
018	2025	Paper	QuadMath: An Analytical Review of 4D and Quadray Coordinates Zenodo	10.5281/zenodo.16887800
019	2025	Paper	ResNei: Solution Design Document Zenodo	10.5281/zenodo.15389682
020	2025	Paper	Symergetics: Symbolic Synergetics for Rational Arithmetic Zenodo	10.5281/zenodo.17114389
021	2025	Paper	Synthesis of Agent and Niche Zenodo	10.5281/zenodo.17235137
022	2025	Presentation	Systems Processes, Active Inference, and Beyond Presentation	10.5281/zenodo.17138223
023	2025	Paper	Temporal Depth in a Coherent Self and in Depersonalization Frontiers in Psychology	10.3389/fpsyg.2025.1585315
024	2025	Paper	The Active Inference Institute & Active Inference Ecosystem (v3, 2025 snapshot) Zenodo	10.5281/zenodo.17982447
025	2025	Paper	The Ant Stack Zenodo	10.5281/zenodo.16782756
026	2025	Paper	The Discovery Engine: AI-Driven Synthesis and Navigation of Scientific Knowledge Landscapes ArXiv	10.48550/arXiv.2505.17500
027	2025	Paper	Thoughtseeds: A Hierarchical and Agentic Framework for Investigating Thought Dynamics in Meditative States Entropy	10.3390/e27050459
028	2025	Paper	Towards a Science of Consciousness and Social Complexity... For Ants Book Chapter	https://www.editorafi.org/ebook/c128-colonias-formigas-conscientes
029	2024	Paper	Aligning Active Inference Ontology to SUMO Zenodo	10.5281/zenodo.11459322



#	Year	Type	Title and Venue	Link
030	2024	Presentation	BioFirm Development at Applied Active Inference Symposium 2024 Presentation	10.5281/zenodo.14861595
031	2024	Paper	Bridging gaps in image meme research: A multidisciplinary paradigm JASIST	10.1002/asi.24900
032	2024	Paper	Chemical and transcriptomic diversity do not correlate with ascending levels of social complexity in Blattodea Ecology & Evolution	10.1002/ece3.70063
033	2024	Paper	Comments on National Digital Twins R&D Strategic Plan Zenodo	10.5281/zenodo.13273681
034	2024	Paper	Enhancing Population-based Search with Active Inference ArXiv	10.48550/arXiv.2408.09548
035	2024	Paper	FarmWorks: Decentralized AI Agents for Personalized Solutions Zenodo	10.5281/zenodo.13754585
036	2024	Paper	Federated inference and belief sharing Neuroscience & Biobehavioral Reviews	10.1016/j.neubiorev.2023.105500
037	2024	Paper	Four-fold Fields of Quantum Dreams Zenodo	10.5281/zenodo.10798145
038	2024	Presentation	MathArt Stream #8: William Blake and Active Inference Presentation	10.5281/zenodo.13711301
039	2024	Presentation	Sensemaking Federation: Exploring the Frontiers of Digital Innovation Presentation	10.5281/zenodo.14574046
040	2024	Paper	Shared Protentions in Multi-Agent Active Inference Entropy	10.3390/e26040303
041	2024	Paper	The Active Inference Institute & Active Inference Ecosystem (v2, 2024 snapshot) Zenodo	10.5281/zenodo.14108992
042	2024	Paper	Way Finding in the Infinite Imaginarium Zenodo	10.5281/zenodo.10601082
043	2024	Paper	Why Paleolithic Rockstars were both enigmatic and sporadic Physics of Life Reviews	10.1016/j.plrev.2024.04.010
044	2024	Paper	Writing on Curio Cards for the "On NFT" book Taschen	https://www.worldcat.org/isbn/978-3-8365-9970-2
045	2023	Paper	A guided tour through the spaces of particular "minds" Physics of Life Reviews	10.1016/j.plrev.2023.11.001
046	2023	Paper	A single-pheromone model accounts for empirical patterns of ant colony foraging Cognitive Systems Research	10.1016/j.coagsvs.2023.02.005
047	2023	Paper	A snapshot and pipeline for tissue-specific gene expression meta-analysis in honey bees Zenodo	10.5281/zenodo.10400744
048	2023	Paper	A variational synthesis of evolutionary and developmental dynamics Entropy	10.3390/e25070964
049	2023	Paper	ATLAS: A Question Oriented Approach to Pattern Languages in Knowledge Management Zenodo	10.5281/zenodo.10296601
050	2023	Paper	An Account of Active Inference Modeling Zenodo	10.5281/zenodo.8415313
051	2023	Paper	Cognitive Sovereignty & Active Inference in the State of Exception Zenodo	10.5281/zenodo.10038232
052	2023	Paper	Comments on AI Accountability Policy to NTIA NTIA	10.5281/zenodo.8025957
053	2023	Paper	Distributed Science — The Scientific Process as Multi-Scale Active Inference OSF	10.31219/osf.io/dnw5k
054	2023	Paper	Enhanced NSF Postdoctoral Reporting via Synthetic Intelligence Language Processing Zenodo	10.5281/zenodo.10160656
055	2023	Paper	Experimental Entomology in the Age of Video JoVE	10.3791/65002
056	2023	Paper	Generalized Notation Notation for Active Inference Models Zenodo	10.5281/zenodo.7803328
057	2023	Paper	Generative Research Teams: Active Inference Compositions for Research and Meta-Science Zenodo	10.5281/zenodo.8164667
058	2023	Presentation	Of Ants & Aging Presentation	10.5281/zenodo.7855582
059	2023	Paper	Open Access science needs Open Science Sensemaking (OSSm) MetaArXiv	10.31222/osf.io/9nb3u
060	2023	Presentation	Postdoc review (2020–2023) Presentation	10.5281/zenodo.8377988
061	2023	Paper	The Active Inference Institute and Active Inference Ecosystem (v1) Zenodo	10.5281/zenodo.8266281



#	Year	Type	Title and Venue	Link
062	2023	Paper	The P3IF: Properties, Processes, and Perspectives Inter-Framework Zenodo	10.5281/zenodo.10034512
063	2023	Paper	To comment or not to comment Physics of Life Reviews	10.1016/j.plrev.2023.06.002
064	2023	Course	Transcript of Chris Fields, "Physics as Information Processing" course Zenodo	10.5281/zenodo.10447642
065	2023	Paper	William Blake & Buckminster Fuller: Lives in Juxtaposition Zenodo	10.5281/zenodo.7514368
066	2022	Paper	An Active Inference Ontology for Decentralized Science Zenodo	10.5281/zenodo.6320574
067	2022	Paper	Catechism for Towards Active Diffusion Zenodo	10.5281/zenodo.7443848
068	2022	Paper	From Users to (Sense)Makers: Stigmergic Social Annotation Hypertext '22	10.48550/arXiv.2205.06345
069	2022	Paper	On free will or the lack thereof (interview with Robert Sapolsky) ALIUS Bulletin	10.5281/zenodo.7394901
070	2022	Paper	Predictive Processing Interpretation of the Mirror Test Zenodo	10.5281/zenodo.7377256
071	2022	Book	Structuring the Information Commons: Open Standards and Cognitive Security COGSEC.org	https://cogsec.org
072	2022	Paper	Systems Modeling and Cognitive Audits for Hypercert Ecosystems Zenodo	10.5281/zenodo.7626769
073	2022	Paper	The Free Energy Principle & Active Inference: a Systematic Literature Analysis Zenodo	10.5281/zenodo.7449368
074	2022	Paper	TrustFinder: Recommendations for Community-Based Trust Systems Zenodo	10.5281/zenodo.7093837
075	2021	Paper	Active Inferants: An Active Inference Framework for Ant Colony Behavior Frontiers in Behavioral Neuroscience	10.3389/fnbeh.2021.647732
076	2021	Paper	Active Inference in Modeling Conflict Zenodo	10.5281/zenodo.5759807
077	2021	Paper	Digital Rhetorical Ecosystem Analysis: Sensemaking of Digital Memetic Discourse Zenodo	10.5281/zenodo.5573947
078	2021	Playbook	Innovator's Digital Playbook Web	https://innovatorsdigitalplaybook.com/
079	2021	Book	Narrative Information Ecosystems: Conflict and Trust on the Endless Frontier COGSEC.org	https://cogsec.org
080	2021	Paper	Narrative Information Management Zenodo	10.5281/zenodo.5573287
081	2021	Playbook	The Facilitator's Catechism Playbook Zenodo	10.5281/zenodo.4579414
082	2020	Paper	Active Inference & Behavior Engineering for Teams Zenodo	10.5281/zenodo.4021163
083	2020	Course	Communication for Remote Teams Udemy	https://www.udemy.com/course/communication-for-remote-teams/
084	2020	Paper	Distributed physiology and the molecular basis of social life in eusocial insects Hormones & Behavior	10.1016/j.vhbeh.2020.104757
085	2020	Paper	Emergent Teams for Complex Threats Zenodo	10.5281/zenodo.3986085
086	2020	Paper	Gene expression variation in the brains of harvester ant foragers is associated with collective behavior Communications Biology	10.1038/s42003-020-0813-8
087	2020	Course	How to use Keybase for remote teams Udemy	https://www.udemy.com/course/keybase-for-remote-teams/
088	2020	Paper	Measurement of natural variation of neurotransmitter tissue content in red harvester ant brains Analytical & Bioanalytical Chemistry	10.1007/s00216-019-02355-3
089	2020	Book	The Great Preset: Remote Teams and Operational Art COGSEC.org	https://cogsec.org
090	2020	Paper	The Innovator's Catechism Zenodo	10.5281/zenodo.4383230
091	2020	Paper	The neuroscience of decision making (interview with Timothy Hanks) ALIUS Bulletin	10.34700/8pp4-0h12
092	2019	Paper	Dennett Explained (interview with Daniel Dennett) ALIUS Bulletin	10.34700/7qkw-zh08
093	2019	Paper	PhD: Behavioral, Physiological, and Transcriptomic Variation Among Colonies of Pogonomyrmex barbatus Stanford University	http://purl.stanford.edu/pb813wm1484
094	2019	Paper	The ant colony as a test for scientific theories of consciousness Synthese	10.1007/s11229-019-02130-v



#	Year	Type	Title and Venue	Link
095	2019	Paper	The physiology of forager hydration and variation among harvester ant colonies Scientific Reports	10.1038/s41598-019-41586-3
096	2018	Paper	Foraging behavior and locomotion of the invasive Argentine ant from winter aggregations PLoS One	10.1371/journal.pone.0202117
097	2018	Presentation	MVEE: A Framework for Evolutionary Studies Presentation	10.5281/zenodo.13999298
098	2018	Paper	Of woodlice and men: A Bayesian account of cognition, life and consciousness (with Karl Friston) ALIUS Bulletin	10.34700/h460-nz89
099	2018	Paper	Partner Pen Play in Parallel (PPPiP): A New Paradigm for Relationship Improvement Arts	10.3390/arts7030039
100	2018	Paper	The Role of Dopamine in Collective Regulation of Foraging in Harvester Ants iScience	10.1016/j.isci.2018.09.001
101	2017	Paper	The MutAnts are here Cell	10.1016/j.cell.2017.07.046
102	2017	Paper	Two lineages that need each other Molecular Ecology	10.1111/mec.13964
103	2016	Paper	Ant Genetics: Reproductive Physiology, Worker Morphology, and Behavior Annual Review of Neuroscience	10.1146/annurev-neuro-070815-013927
104	2016	Paper	Context-dependent expression of the foraging gene in field colonies of ants Proceedings of the Royal Society B	10.1098/rspb.2016.0841
105	2016	Paper	Influence of Nuclear Structure on formation of radiation-induced lethal lesions Int. J. Radiation Biology	10.3109/09553002.2016.1144941
106	2015	Paper	Commentary: Portuguese crypto-Jews: the genetic heritage of a complex history Frontiers in Genetics	10.3389/fgene.2015.00261
107	2015	Paper	Could Ehrlichial Infection Cause Some Changes Associated with Leukemia? Medical Hypotheses	10.1016/j.mehv.2015.09.015
108	2015	Paper	Large Scale Coding Sequence Change Underlies the Evolution of Post-developmental Novelty in Honey Bees Molecular Biology & Evolution	10.1093/molbev/msu292
109	2026	Paper	Ento-Linguistics: Language, Ambiguity, and Scientific Communication in Entomology Zenodo	10.5281/zenodo.19574118
110	2026	Paper	A Living Meta-Analysis Architecture for Active Inference: Assertion Extraction, Nanopublications, and Hypothesis Scoring Active Inference Journal	10.5281/zenodo.19897664
111	2026	Paper	Dynamic Attentional Agents in Focused Attention Meditation: Hierarchical Computational Modeling of Expert-Novice Differences CSCIS vol 2857, Springer	10.1007/978-3-032-16955-6_11
112	2026	Paper	Compositional Approaches to Linguistic Case for Cognitive Modeling Active Inference Journal	10.5281/zenodo.19695260
113	2026	Paper	Towards Lean 4 Formalization of the Free Energy Principle: AI-Driven Theorem Sketching and Verification for Active Inference and Bayesian Mechanics Active Inference Journal	10.5281/zenodo.19699234
114	2020	Paper	The Facilitator's Catechism Zenodo	10.5281/zenodo.4203765
115	2026	Paper	The Architecture of False Gods: William Blake, Professor Jiang, and the Active Inference Corrective to Single Vision Zenodo	10.5281/zenodo.20144984
116	2026	Paper	Crescent City in Living Waves: Space, Time, People, and Minds on the Southern Cascadian Coast Zenodo	10.5281/zenodo.20286171
117	2026	Book	Introduction to Biology: A Generative Approach Zenodo	10.5281/zenodo.20286478
118	2025	Paper	CEREBRUM: Case-Enabled Reasoning Engine with Bayesian Representations for Unified Modeling Zenodo	10.5281/zenodo.15231156
119	2026	Paper	Policy Entanglement in Active Inference Zenodo	10.5281/zenodo.20419186
120	2026	Paper	Bounded AutoResearch for a Tiny Reproducible Machine-Learning Task Zenodo	10.5281/zenodo.20417017
121	2026	Paper	Convergence Analysis of Gradient Descent Optimization Zenodo	10.5281/zenodo.20417137
122	2026	Paper	Editorial Quality at Scale: A Reproducible Prose-Review Pipeline Zenodo	10.5281/zenodo.20417105
123	2026	Paper	A template/ approach to Reproducible Generative Research Zenodo	10.5281/zenodo.20419084



#	Year	Type	Title and Venue	Link
124	2026	Paper	Active Inference Multi-Track Exemplar Zenodo	10.5281/zenodo.20417022



Software (82)

Repository	Stack	Description and Source Links
docxology/template https://github.com/docxology/template	Python	Multi-project research template with 10-stage CI/CD pipeline, Ruff linting, multi-Python-version testing, issue/PR templates, and security scanning
docxology/QuadCraft https://github.com/docxology/QuadCraft	JavaScript	Minecraft variant built on tetrahedral geometry — voxels replaced by Quadray-coordinate tetrahedra, exploring Buckminster Fuller's synergetics in an interactive 3D world
docxology/MetalInformAnt https://github.com/docxology/MetalInformAnt	Python	Meta-framework integrating computational entomology, Active Inference, and information theory for modeling ant colony cognition and beyond paper: papers/2021_ActiveInferants/
docxology/codomymx https://github.com/docxology/codomymx	Python	AI-native modular coding workspace — 128 modules, 600 MCP tools, 21K+ zero-mock tests, multi-agent orchestration (Claude/Gemini/GPT), PAI integration
docxology/cognitive-engine https://github.com/docxology/cognitive-engine	Python	Hybrid neuro-symbolic AI combining fractal symbolic representations with probabilistic neural models for enhanced reasoning; includes Unipixel fractal building blocks and PEFF ethical reasoning
docxology/opentir https://github.com/docxology/opentir	Python	Comprehensive toolkit analyzing 250+ Palantir open-source repositories (6.2M+ lines of code) — automated discovery, multi-language analysis, dependency mapping, statistical profiling, and professional visualizations
docxology/timeline_generator https://github.com/docxology/timeline_generator	TypeScript	Networked Life Encoding — interactive D3 knowledge graph of human intellectual history; 24 relationship types, Perplexity AI enrichment; seeded around R. Buckminster Fuller's network
docxology/FORMINDEX https://github.com/docxology/FORMINDEX	Rich Text Format	Analysis and tooling around FORMIS, the world's largest ant-literature database; bibliometric mining and structured index generation
docxology/ActiveInferAnts https://github.com/docxology/ActiveInferAnts	Python	Active Inference for ants — multi-language implementations (Python) for modeling ant-colony cognition as Bayesian agents minimizing free energy paper: papers/2021_ActiveInferants/
docxology/crescent-city https://github.com/docxology/crescent-city	TypeScript	End-to-end pipeline for ingesting, parsing, and querying the Crescent City, CA municipal code; TypeScript-based legal-text processing
docxology/ivm-xyz https://github.com/docxology/ivm-xyz	Python	Python library for 3D and 4D Quadray/IVM (Isotropic Vector Matrix) geometry — coordinate conversion, volume calculations, and polyhedral operations
docxology/Markov_Blanket_Detection https://github.com/docxology/Markov_Blanket_Detection	Python	Dynamic Markov Blanket Detection (DMBD) — PyTorch-accelerated framework for identifying causal relationships in complex systems; static and temporal modes with cognitive-structure labeling
docxology/QuadMath https://github.com/docxology/QuadMath	TeX	Mathematical exposition of Quadray coordinate systems (4-vector tetrahedral coordinates); LaTeX documentation and computation library
docxology/active_inference https://github.com/docxology/active_inference	Python	Active Inference for, with, and by Generative AI — Python implementations of free-energy-minimizing agents integrated with modern AI tooling paper: papers/2020_BehaviorEngineering/
docxology/AgenticMesh https://github.com/docxology/AgenticMesh	Python	Active Inference & Agentic Mesh — modular Python infrastructure for building agentic systems using free-energy-minimizing Active Inference principles
docxology/curriculum https://github.com/docxology/curriculum	HTML	Curriculum development framework for interdisciplinary education in Active Inference, biology, and computational science
docxology/lean_niche https://github.com/docxology/lean_niche	Python	Lean/minimal niche-construction modeling — formal computational representations of ecological niche dynamics
docxology/literature https://github.com/docxology/literature	Python	Literature collection and analysis tools for structured ingestion, annotation, and exploration of scientific publications
docxology/obsidian-construction-from-text https://github.com/docxology/obsidian-construction-from-text	Python	Automated Obsidian vault construction from unstructured text — NLP pipelines to generate bidirectionally-linked knowledge graphs
docxology/qr_live_protocol https://github.com/docxology/qr_live_protocol	Python	QR code-based live protocol system for real-time data exchange and interactive session management
docxology/ultralink-docx https://github.com/docxology/ultralink-docx	HTML	UltraLink document format tooling — linking, rendering, and transformation utilities for rich hyperlinked documents



Repository	Stack	Description and Source Links
docxology/cognitive https://github.com/docxology/cognitive	Python	Cognitive Ecosystem Modeling Framework — Active Inference agents with Obsidian-compatible knowledge management, bidirectional graph validation, belief updating, and network visualization
docxology/active_torchference https://github.com/docxology/active_torchference	Python	PyTorch-based Active Inference implementations — GPU-accelerated variational inference and free energy minimization
docxology/ant-pheromone https://github.com/docxology/ant-pheromone	Python	Computational simulation of ant pheromone trail dynamics and stigmergic communication
docxology/ant_stack https://github.com/docxology/ant_stack	Python	The Ant Stack — layered computational model of collective ant-colony intelligence paper: papers/2025_AntStack/
docxology/ento_linguistics https://github.com/docxology/ento_linguistics	Python	Ento-Linguistics corpus pipeline — term extraction, terminology networks, semantic entropy, CACE scoring paper: papers/2026_EntoLinguistics/
docxology/cognitive_case_diagrams https://github.com/docxology/cognitive_case_diagrams	TeX	Compositional linguistic case for cognitive modeling — categorical case systems, DisCoCat/DisCoCirc diagrams, tests and figures for the Active Inference Journal manuscript paper: papers/2026_CognitiveCaseDiagrams/
docxology/Autonomous-Drone-Navigation-in-AirSim-With-Active-Inference https://github.com/docxology/Autonomous-Drone-Navigation-in-AirSim-With-Active-Inference	Julia	Active Inference-driven autonomous drone navigation in Microsoft AirSim simulation environment
docxology/biol-1 https://github.com/docxology/biol-1	HTML	BIOL-1: General Biology course materials — College of the Redwoods; lectures, labs, and interactive HTML content
docxology/biol-8 https://github.com/docxology/biol-8	HTML	BIOL-8: Human Biology course materials — College of the Redwoods; lectures, labs, and interactive HTML content
docxology/biology_textbook https://github.com/docxology/biology_textbook	Python	Open generative biology textbook — Markdown source, tested Python modules, programmatic figures; archived at Zenodo paper: papers/2026_BiologyTextbook/ zenodo: https://doi.org/10.5281/zenodo.20286478
docxology/cascadia https://github.com/docxology/cascadia	Python	Cascadia bioregion modeling and data analysis tools
docxology/course https://github.com/docxology/course	Python	Course materials framework for structured interdisciplinary learning modules
docxology/enactive_inference_model https://github.com/docxology/enactive_inference_model	Python	Three-level hierarchical enactive inference model of mental action — focused-attention meditation with expert/novice profiles; reproducible simulations and figures paper: papers/2025_Thoughtseeds/
docxology/EvoJump https://github.com/docxology/EvoJump	Python	Comprehensive Framework for Evolutionary Ontogenetic Analysis — modeling developmental trajectories and evolutionary dynamics paper: papers/2025_EvoJump/
docxology/flick https://github.com/docxology/flick	Python	Lightweight Python tooling for rapid data flicking and processing pipelines
docxology/fuller-obsidian https://github.com/docxology/fuller-obsidian	unspecified	Obsidian vault dedicated to R. Buckminster Fuller's ideas — synergetics, geodesics, and design science
docxology/godel_ivm https://github.com/docxology/godel_ivm	Python	Gödel numbering meets the IVM (Isotropic Vector Matrix) — formal encoding of geometric objects as prime products
docxology/goference https://github.com/docxology/goference	Go	Active Goference — production-ready Go framework for Active Inference autonomous agents; genuine variational inference, free energy minimization, POMDP policy planning via gonum
docxology/hhs-opendata https://github.com/docxology/hhs-opendata	Python	Analysis of HHS (Department of Health and Human Services) open data — policy analytics and public-health data pipelines
docxology/infra-calc https://github.com/docxology/infra-calc	JavaScript	Infrastructure calculator for estimating resource requirements and costs in multi-agent and AI systems



Repository	Stack	Description and Source Links
docxology/markdown_decision_processes https://github.com/docxology/markdown_decision_processes	Python	Framework for Probabilistic Document Analysis — Markov Decision Process over Markdown artifacts for structured document reasoning paper: papers/2025_MarkdownDecisionProcess/
docxology/mdkv https://github.com/docxology/mdkv	Python	MKV-like key-value format and methods for Markdown — structured metadata embedding in plain-text documents paper: papers/2025_MDKV/
docxology/p3if https://github.com/docxology/p3if	Python	Properties, Processes, and Perspectives Inter-Framework (P3IF) — multiplexing interdisciplinary requirements frameworks to manage information risk and foster cognitive security paper: papers/2023_P3IF/
docxology/service https://github.com/docxology/service	Python	Service-layer infrastructure and API tooling for Python-based research applications
docxology/snake https://github.com/docxology/snake	Python	Classic snake game implemented in Python — used for testing multi-agent and reinforcement learning algorithms
docxology/steganographer https://github.com/docxology/steganographer	Rust	High-performance Rust tool for embedding BLAKE3+Ed25519 cryptographic signatures and visible watermarks into live video/audio via LSB steganography; four Rust crates, 132 tests, GStreamer integration
docxology/blake_jiang https://github.com/docxology/blake_jiang	Python	William Blake, Professor Jiang, and the Architecture of Intelligence — AI-augmented scholarly response to Game Theory #24 with Blake, Jiang, and Active Inference framing paper: papers/2026_BlakeJiang/
docxology/symergetics https://github.com/docxology/symergetics	Python	Symbolic Synergetics — computer algebra and formal symbolic systems for Buckminster Fuller's synergetics mathematics
docxology/transformer https://github.com/docxology/transformer	Python	Transformer architecture explorations — attention mechanisms and architectural variants for Active Inference research
ActiveInferenceInstitute/ActiveInferenceJournal https://github.com/ActiveInferenceInstitute/ActiveInferenceJournal	HTML	Content hub for the Active Inference Journal — 500+ video transcripts, stream archives, and multimedia publishing infrastructure for the Institute's primary educational output
ActiveInferenceInstitute/ActiveBlockference https://github.com/ActiveInferenceInstitute/ActiveBlockference	Jupyter	Active Inference agents in cadCAD block-based simulation — formal agent-based modeling using complex-systems simulation framework
ActiveInferenceInstitute/ActiveInferAnts https://github.com/ActiveInferenceInstitute/ActiveInferAnts	Python	Active Inference models for/of ants across 32+ programming languages — multi-language reference implementation of stigmergic Active Inference
ActiveInferenceInstitute/GeneralizedNotationNotation https://github.com/ActiveInferenceInstitute/GeneralizedNotationNotation	Python	GNN — formal notation standard for specifying Active Inference generative models; JSON/YAML schema, validators, and transpilers to Python, Julia, and MATLAB · Zenodo software zenodo: https://doi.org/10.5281/zenodo.19600217
ActiveInferenceInstitute/fep_lean https://github.com/ActiveInferenceInstitute/fep_lean	Python	Lean 4 / Mathlib4 formalization of FEP-related mathematics — 50-topic sorry-free catalog, Hermes/OpenGauss LLM drafting, zero-mock verification, manuscript pipeline · Zenodo paper: papers/2026_FEPLean/ zenodo: https://doi.org/10.5281/zenodo.19699234
ActiveInferenceInstitute/cognitive https://github.com/ActiveInferenceInstitute/cognitive	Python	Cognitive modeling and simulation tools — multi-agent Active Inference environments, benchmarks, and visualization
ActiveInferenceInstitute/Active_Inference_Ontology https://github.com/ActiveInferenceInstitute/Active_Inference_Ontology	unspecified	Formal OWL/RDF ontology for Active Inference — defines classes, properties, and axioms for free energy principle concepts
ActiveInferenceInstitute/Journal-Utilities https://github.com/ActiveInferenceInstitute/Journal-Utilities	HTML	Transcription, processing, and publishing pipelines for the Active Inference Journal — Whisper-based download, transcription, RAG/knowledge-graph, and export utilities · Zenodo release zenodo: https://doi.org/10.5281/zenodo.18686966
ActiveInferenceInstitute/Symposium https://github.com/ActiveInferenceInstitute/Symposium	Python	Applied Active Inference Symposium materials — talks, workshops, proceedings, and collaborative session artifacts from annual Applied AIF symposia



Repository	Stack	Description and Source Links
ActiveInferenceInstitute/ActiveInferenceCategoryTheory https://github.com/ActiveInferenceInstitute/ActiveInferenceCategoryTheory	unspecified	Formal categorical foundations for Active Inference — string diagrams, functorial semantics, and compositional models using category theory
ActiveInferenceInstitute/CEREBRUM https://github.com/ActiveInferenceInstitute/CEREBRUM	Python	Case-Enabled Reasoning Engine with Bayesian Representations for Unified Modeling — grammatical case framework for compositional cognitive models · Zenodo paper: papers/2025_CEREBRUM2/ zenodo: https://doi.org/10.5281/zenodo.15231156
ActiveInferenceInstitute/GEO-INFER https://github.com/ActiveInferenceInstitute/GEO-INFER	HTML	Geospatial Active Inference — applying free energy minimization to geographic systems, spatial planning, and bioregional intelligence
ActiveInferenceInstitute/AEOS https://github.com/ActiveInferenceInstitute/AEOS	unspecified	Active Entity Ontology for Science — OWL ontology for representing active entities, their actions, and causal relationships in scientific models
ActiveInferenceInstitute/courses https://github.com/ActiveInferenceInstitute/courses	HTML	Structured Active Inference learning courses — cohort-based curriculum materials, exercises, and collaborative learning artifacts
ActiveInferenceInstitute/Research-Discovery-Engine https://github.com/ActiveInferenceInstitute/Research-Discovery-Engine	HTML	AI-driven research synthesis and navigation — semantic search, citation graph analysis, and cross-domain connection discovery across the Active Inference literature
ActiveInferenceInstitute/Parr_et_al_2022_ActInf_Textbook https://github.com/ActiveInferenceInstitute/Parr_et_al_2022_ActInf_Textbook	Julia	Active Inference Textbook Study Group — code, exercises, and reading notes accompanying Parr, Pezzulo & Friston (2022)
ActiveInferenceInstitute/Biofirm https://github.com/ActiveInferenceInstitute/Biofirm	Python	Bioregional Active Inference for organizational stewardship — applying free energy minimization to ecological and community governance systems
ActiveInferenceInstitute/Start https://github.com/ActiveInferenceInstitute/Start	Python	Institute onboarding hub — getting-started guides, contributor pathways, project index, and orientation materials for new participants
ActiveInferenceInstitute/Knowledge-Engineering https://github.com/ActiveInferenceInstitute/Knowledge-Engineering	Jupyter	Knowledge engineering tools and workflows — ontology alignment, concept mapping, and structured knowledge-base construction for Active Inference
ActiveInferenceInstitute/ActInf_RxInfer https://github.com/ActiveInferenceInstitute/ActInf_RxInfer	unspecified	Active Inference with RxInfer.jl — Julia-based reactive message passing for efficient Bayesian inference in Active Inference models
ActiveInferenceInstitute/pymcp https://github.com/ActiveInferenceInstitute/pymcp	Python	PyMCP — Model Context Protocol bridge for PyMDP, enabling Active Inference agents to interoperate with MCP-compatible AI tooling
ActiveInferenceInstitute/GEN24 https://github.com/ActiveInferenceInstitute/GEN24	Jupyter	GEN-24 working project — collaborative generative systems research from the 2024 active inference cohort
ActiveInferenceInstitute/NoOrg https://github.com/ActiveInferenceInstitute/NoOrg	HTML	NoOrg is a Real Org — experimental organizational infrastructure and governance frameworks for decentralized scientific institutions
ActiveInferenceInstitute/ultralink https://github.com/ActiveInferenceInstitute/ultralink	unspecified	UltraLink — framework for linking, rendering, and transforming richly cross-referenced documents across multiple output formats
ActiveInferenceInstitute/ActiveInferenceImplementations https://github.com/ActiveInferenceInstitute/ActiveInferenceImplementations	Jupyter	Learning and exploring probabilistic inference — beginner-accessible Jupyter notebooks for Active Inference from first principles
ActiveInferenceInstitute/ATLAS https://github.com/ActiveInferenceInstitute/ATLAS	Python	Question-Oriented Pattern Languages for Knowledge Management — structured templates for navigating complex scientific knowledge spaces
ActiveInferenceInstitute/Bots https://github.com/ActiveInferenceInstitute/Bots	unspecified	Institute bot infrastructure — automation, notification, and community management bots for the Active Inference Institute's platforms



Repository	Stack	Description and Source Links
ActiveInferenceInstitute/Garden-of-Iris https://github.com/ActiveInferenceInstitute/Garden-of-Iris	Python	Interactive visualization garden — generative art and data-visualization experiments exploring Active Inference dynamics
ActiveInferenceInstitute/gen25 https://github.com/ActiveInferenceInstitute/gen25	unspecified	GEN-25 working project — generative systems and collaborative research from the 2025 active inference cohort
ActiveInferenceInstitute/gnn https://github.com/ActiveInferenceInstitute/gnn	unspecified	Generalized Notation Notation v2 — next-generation GNN specification with extended model classes and improved toolchain
ActiveInferenceInstitute/ISSS https://github.com/ActiveInferenceInstitute/ISSS	Python	International Society for the Systems Sciences collaboration — joint research and educational materials bridging Active Inference and systems science
ActiveInferenceInstitute/topp https://github.com/ActiveInferenceInstitute/topp	TeX	The Open Problems Project — curated registry of open scientific problems in Active Inference and the free energy principle

Conferences, Posters, Seminars, Workshops (17)

2025 Inference about Foraging and Foraging as Inference Queens College, CUNY, Biology - Talk Source: Queens College Biology https://www.qc.cuny.edu/academics/bio/
2025 Systems Processes, Active Inference, and Beyond Enduring Patterns, Emerging Futures: Celebrating Dr. Len Troncale - Talk 2025-09-17 Source: Zenodo presentation https://doi.org/10.5281/zenodo.17138223
2024 ...And Eternity in an hour of Systems Science Education and Knowledge Engineering ISSS 2024 - Workshop Source: ISSS https://iss.s.org/world/
2024 Funding AI public goods and keeping them public Funding the Commons - Panel Source: Funding the Commons https://fundinathecommons.io/
2024 Intelligence in the Age of LLMs European Identity and Cloud Conference 2024 - Panel Source: KuppingerCole EIC speaker https://www.kuppingercole.com/events/eic2024/speakers/3516
2022 Tissue-specific gene expression meta-analysis in honey bees (Apis mellifera) Entomology Society of America, Pacific Branch - Talk 2022-04-10 Source: Entomological Society of America https://entsoc.org/events
2021 Thinking like a State: Active inference and the deep roots of complex societies Cognition 2021 - Talk Avel Guenin-Carlut, Daniel Friedman, and Virginia Bleu Knight. Source: Cognition https://cognition.uqam.ca/
2021 Introducing Active Inference as An Integrative Principle in The Study of Collective Intelligence ACM-CI 2021 - Talk Avel Guenin-Carlut and Daniel Friedman. Source: ACM Collective Intelligence https://ci.acm.org/
2020 Active Inference for Communicating Systems IIBM, Chile - Talk Invited online seminar. 2020-11-03 Source: IIBM https://www.iibm.cl/
2019 Invited seminar, Department of Animal Behavior, University of California, Davis Essig Brunch Seminar Series - Talk 2019-04-05 Source: UC Davis Entomology https://entomology.ucdavis.edu/



2018 Invited seminar, SUMS-RAS | Stanford University Mass Spectrometry Research Symposium

- Talk 2018-10-04

Source: Stanford Mass Spectrometry <https://mass-spec.stanford.edu/>

2018 Invited seminar, University of California, Berkeley | Essig Entomology Brunch

- Talk 2018-02-06

Source: Essig Museum <https://essig.berkeley.edu/>

2017 The role of dopamine in the regulation of foraging in the red harvester ant | Entomology 2017

- Poster

Source: Entomological Society of America <https://entsoc.org/events/annual-meeting>

2017 Quantitative LC-MS/MS analysis of dopamine in single ant brain samples | ASMS 2017

- Poster KM Krasinska, DA Friedman, DM Gordon, AS Chien.

Source: ASMS Annual Conference <https://www.asms.org/conferences/annual-conference>

2015 Transcriptomic analysis of the regulation of foraging in harvester ants | Biology and Genetics of Social Insects, CSHL 2015

- Poster DA Friedman, A Pilko, DM Gordon.

Source: Cold Spring Harbor Meetings <https://meetings.cshl.edu/>

2014 Evolution of sex comb enhancers in the HOX gene Scr | Drosophila Research Conference 2014

- Poster DA Friedman, T Orenic, C McCullough, E Eksi, OY Barmina, A Kopp.

Source: GSA Drosophila Conference <https://genetics-gsa.org/drosophila/>

2012 Visualizing the Integration of Sensory Neurons into a Sex-Specific Central Nervous System Circuit in 3-D | UC Davis Undergraduate Research Conference

- Talk DA Friedman.

Source: UC Davis Undergraduate Research Center <https://urc.ucdavis.edu/>

Science Engagement, Outreach, Quotes, Articles (29)

2026 S3E10 The FEP: A Tool for Understanding and Modelling Complex Systems

- Video conversation on another channel

Source: BathmikeC podcast <https://bathmikec.podbean.com/e/s3e10-the-fep-a-tool-for-understanding-and-modelling-complex-systems/>

2025 (DIA 1/SESSAO 1) Lancamento do Livro: As Colonias de Formigas Sao Conscientes?

- Video conversation on another channel

Source: YouTube <https://www.youtube.com/watch?v=Bl-PAt3cxf4>

2024 From Ants to Active Inference with Daniel Ari Friedman

- Video conversation on another channel | Love and Philosophy, Andrea Hiott

Source: YouTube https://www.youtube.com/watch?v=x_VPw1K55BM

2024 Building Smarter AI: Active Inference and Nested Models

- Video conversation on another channel | Bagaev, de Vries, Friedman, Pashea.

Source: YouTube <https://youtu.be/u3w24FtAsKw>

2024 Interaction. In Search of Daniel Friedman's Deepest Value

- Video conversation on another channel | Math4Wisdom

Source: YouTube <https://www.youtube.com/watch?v=T05uLRbcloE>

2023 Active Inference and The Free Energy Principle with Daniel Friedman

- Video conversation on another channel | No Way Out podcast

Source: YouTube <https://www.youtube.com/watch?v=pYleeDb-B5E>

2023 Episode 6: Daniel Friedman - Active Inference Institute - What is Active Inference?

- Video conversation on another channel | Denise Holt

Source: YouTube <https://www.youtube.com/watch?v=ZvFqRbP1KE0>



2022 Artist of Curio Cards 24-26 Shares Incredible Journey through Art and Science

- Video conversation on another channel | Jake Gallen

Source: YouTube https://youtu.be/X_F2YFliUnY

2022 What Ant Behavior Reveals About Complexity Science with Daniel Friedman

- Video conversation on another channel | Making Sense of Complexity

Source: YouTube <https://youtu.be/QR98-sG8r0> | YouTube episode <https://www.youtube.com/watch?v=4qsvV38qfTw>

2022 What is Active Inference?...with Daniel Friedman

- Video conversation on another channel | Inner Sense

Source: YouTube <https://youtu.be/vHnm-zMqLVY>

2022 Great discussion with Daniel, OG Curio Card artist, cards 24, 25, 26

- Video conversation on another channel | ZeroG

Source: YouTube <https://youtu.be/AHOGPsglWmU>

2022 Daniel Friedman Interview - Adventures in NFTs #3

- Video conversation on another channel | World Crypto Network

Source: YouTube https://www.youtube.com/watch?v=mU_lwFsEpNg

2022 Banging the Drum with Daniel Friedman

- Video conversation on another channel | Nicholas Pacheco

Source: YouTube <https://www.youtube.com/watch?v=fBuS4yIitw>

2022 KB7 Fireside: Scaling Principled Games

- Video conversation on another channel | Kernel

Source: YouTube <https://www.youtube.com/watch?v=vFOk8UR-UVQ>

2022 KBCast Episode 7: Kernel Block 5 Week 6 and special guest Daniel Ari Friedman

- Video conversation on another channel | Active Inference Lab

Source: YouTube <https://www.youtube.com/watch?v=R5zdTez8CPk>

2021 Daniel Friedman Interview - Adventures in NFTs #3

- Video conversation on another channel | World Crypto Network

Source: YouTube https://youtu.be/mU_lwFsEpNg

2020 Interview with Monica Kang about Complexity Weekend, with co-founder Shaun Swanson and organizer JP Gonzales

- Video conversation on another channel

Source: YouTube <https://youtu.be/nEaG4xi6MCE>

2021 Blurb in Science magazine inventing the word disinform

- Blurb

Source: Science <https://www.science.org/doi/10.1126/science.abq0904>

2021 Complexity Weekend featured on InnovatorsBox blog, with quotes from Friedman and others

- Blurb

Source: InnovatorsBox <https://blog.innovatorsbox.com/complexity-weekend/>

2020 Blurb in Science magazine about rethinking time use for scientists

- Blurb

Source: Science <https://www.science.org/>

2016 Blurb in Science magazine about what ants can teach human city planners

- Blurb

Source: Science <https://www.science.org/doi/abs/10.1126/science.aag1520>

2013 Blurb in Science magazine about time travel

- Blurb

Source: Science <https://www.science.org/>



2017 Public lecture: Red Vic lecture series, San Francisco. History and philosophy of Art and Biology.

- Lecture

Source: verification <https://danielarifriedman.com/resume/verify.html>

2016 Public lecture: Red Vic lecture series, San Francisco. History and philosophy of self-organization, stigmergy, and eusocial insects.

- Lecture

Source: verification <https://danielarifriedman.com/resume/verify.html>

2021 Quoted in Dopamine Nation by Dr. Anna Lembke, p. 75: The world is sensory rich and causal poor.

- Quote

Source: Dopamine Nation <https://www.penguinrandomhouse.com/books/624957/dopamine-nation-by-anna-lembke-md/>

2025 No Signal 006: Daniel Ari Friedman and Jakub Smekal || Active Inference

- Profile or Interview

Source: No Signal <https://kernel0x.substack.com/p/no-signal-006-daniel-ari-friedman>

2022 Daniel Friedman: Drawing Decentralized Beauty From Biology

- Profile or Interview | Curio DAO

Source: Curio DAO Mirror https://mirror.xyz/0x8Fbf5c7Ca1295e892cC865500A8420C3316b889c/zvis_d2IhIUA0Ll4mCilrvomZr93901T71a5-R1Y

2021 Written interview with RosyBVM

- Profile or Interview

Source: Rosy Conversation <https://rosybvm.com/2021/01/20/rosy-conversation-with-daniel-ari-friedman/>

2019 Radio Interview, KPOO 89.5 FM in San Francisco

- Radio

Source: KPOO <https://kpoa.com/>

Professional Participation, Engagement, and Service (27)

2022-2024 ISSS | Board of Directors

- Vice-President for Communication and Systems Education on the International Society for the Systems Sciences Board.

Source: ISSS <https://www.issss.org/home/>

2021-2023 JoVE | Academia

- Co-editor, Field and Laboratory Methods for Modern Entomology.

Source: JoVE methods collection <https://www.love.com/methods-collections/567/field-and-laboratory-methods-for-modern-entomology>

2021 Cybernetics Society | Membership

- Member (MCyBS), Cybernetics Society.

Source: Cybernetics Society <http://cybsoc.org/>

2020-ongoing IPA | Membership

- Information Professional Association.

Source: IPA <https://information-professionals.org/>

2020-ongoing Active Inference Institute | Community

- Active Inference Institute co-founder.

Source: Active Inference Institute <https://www.activeinference.institute/>

2020-2023 Davis Complexity Group | Community

- Davis Complexity Group.

Source: verification <https://danielarifriedman.com/resume/verify.html>

2019-2024 Complexity Adventures | Community

- Complexity Adventures co-founder.

Source: Complexity Adventures <https://www.complexityadventures.com/>



2018-2021 ALIUS | Membership

- ALIUS Research Group contributor, editor, and co-organizer.

Source: ALIUS Research Group <https://www.aliusresearch.org/>

2018-2019 Wonderfest | Community

- Wonderfest Science Envoy; science outreach and community training.

Source: Wonderfest <https://wonderfest.org/>

2017-2021 ESA | Membership

- Entomological Society of America.

Source: Entomological Society of America <https://www.entsoc.org/>

2017-2019 Stanford | Academia

- NeuroChoice group, Stanford Neurosciences Institute.

Source: NeuroChoice <https://neurochoice.stanford.edu/purpose>

2017-2018 Stanford | Membership

- Graduate student member of Arts Committee for Stanford Biology department.

Source: Stanford Biology <https://biology.stanford.edu/>

2016-2019 Stanford Complexity Group | Community

- Stanford Complexity Group.

Source: Stanford <https://www.stanford.edu/> | verification <https://danielarifriedman.com/resume/verify.html>

2016 Stanford | Community

- Science Teaching Through Art (STAR) outreach program; poster presentations and conversations about ants at local middle and high schools.

Source: Stanford <https://www.stanford.edu/>

2015 Santa Fe Institute | Workshop

- Santa Fe Institute Complex Systems Summer School, one-month residential program.

Source: Santa Fe Institute CSSS <https://www.santafe.edu/engage/learn/programs/sfi-complex-systems-summer-school>

2014-2018 Gordon Lab | Field work

- Five summers of ant fieldwork during PhD under Prof. Deborah Gordon at Southwestern Research Station, Arizona.

Source: Southwestern Research Station <https://www.amnh.org/research/southwestern-research-station>

2014 Stanford | Field work

- Summer field ecology class with Stanford Prof. Rodolfo Dirzo at Las Tuxtlas tropical research station, Mexico.

Source: Los Tuxtlas Biological Station <https://www.ibiologia.unam.mx/eblt/>

2014 NIMBioS | Workshop

- Summer workshop on Evolutionary and Quantitative Genetics at NIMBioS, University of Tennessee, Knoxville.

Source: NIMBioS http://www.nimbios.org/tutorials/TT_eqq

2014 Science | Field work

- Drosophila work with Dr. Michael Lang in Arizona.

Source: Drosophila Evolution <https://droseu.net/drosophila-evolution/>

2014-ongoing Science | Academia

- Invited peer reviewer for 1-10 articles per year across different journals.

Source: Science <https://www.science.org/>

2014-2023 IUSSI | Membership

- International Union for the Study of Social Insects.

Source: IUSSI <https://ius.si.org/>

2014-2017 Stanford | Community

- Stanford Center for Evolutionary and Human Genomics outreach programs, including teaching genetics in local middle schools and hosting high school students at Stanford.

Source: Stanford Center for Evolution and Human Genomics <https://cehg.stanford.edu/>



2014-2017 Stanford | Community

- Stanford Bio Core Explorations hands-on lecture/workshop for undergraduates: Art and Biology.

Source: Stanford Biology <https://biology.stanford.edu/>

2013 UC Davis | Community

- Science mentoring at Woodland High School.

Source: Woodland High School <https://whs.wiusd.org/>

2012 UC Davis | Community

- Drums and percussion for UC Davis production of RENT.

Source: UC Davis <https://www.ucdavis.edu/>

2012-2013 UC Davis | Community

- Volunteer in emergency room at hospital in Sacramento, four hours per week for six months.

Source: UC Davis Health <https://health.ucdavis.edu/>

2011-2014 UC Davis | Community

- Chess Club at UC Davis President (2012-2014), organizing free outdoor chess at the farmer's market twice weekly for two years.

Source: UC Davis Campus Recreation <https://campusrecreation.ucdavis.edu/>

Art Portfolio and Uses (14)

All Art portfolio

- Posting drawings to an online portfolio since 2009.

Source: Flickr http://flickr.com/photos/daniel_friedman/

2021 Curio Cards

- A full Curio Cards set sold at Christie's on October 1, 2021 for 393 ETH, approximately \$1.2 million.

Source: Christie's Curio Cards lot <https://www.christies.com/lot/lot-6337619>

2021 Curio Cards

- Curio Cards collection stored in the Arctic World Archive with art and provenance data intended for long-duration preservation.

Source: Top Dog Beach Club <https://topdogbeachclub.com/non-fungible-vault/>

2021 Curio Cards

- Public auction and market history for Curio Cards includes major 2021 sales; verify venue-specific claims before reusing exact auction-house wording.

Source: Sotheby's Curio Cards <https://metaverse.sothebys.com/natively-digital/lots/curio-cards-complete-set-1-30-plus-17b>

2019 Art used

- Art used in the eBook *Rebelling with Care: Exploring open technologies for commoning healthcare*.

Source: ResearchGate https://www.researchgate.net/publication/335911369_Rebelling_with_Care_Exploring_open_technologies_for_commoning_healthcare

2019 Art used

- Art used in Slate.fr blog.

Source: Slate France <https://www.slate.fr/story/173103/fecondation-spermatozoide-ovule-chevalier-belle-au-bois-dormant-mythe-sexisme-naturalisation-biologie?>

2019 Art used

- Art used in degrowth blog.

Source: Degrowth.info <https://www.degrowth.info/blog/on-strategies-for-socioecological-transformation>

2018 Art used

- Art used in Medium post by Lorena Cabeza, August 23, 2018.

Source: Medium <https://medium.com/@lorenacabeza/manifiesto-la-escritura-y-la-vida-10d4c254c0bf>

2018 Art used

- Cover image of Probe magazine.

Source: Probe Magazine <https://www.ssbprobe.com/decentraldogma-danielfriedman>



2017 Curio Cards

- Early Ethereum art NFT project; art for Curio Cards 24, 25, and 26.

Source: Curio Cards artist <https://curio.cards/artist/danielfriedman/> | Curio Cards docs <https://docs.curio.cards/the-artists/daniel-friedman>

2017 Art used

- Art used in Bas Haring blog.

Source: Me Judice <https://www.meiudice.nl/artikelen/detail/mijn-economiemuseum-de-markt>

2017 Art used

- Art used in Vice Motherboard blog.

Source: VICE Motherboard <https://www.vice.com/en/article/jpaqk8/a-dollar25-million-book-heist-proves-the-printed-page-is-still-sacred>

2016 Art used

- Featured in Genetics Society of America art blog.

Source: Genes to Genomes <https://genestogenomes.org/gsa-art-daniel-friedman/>

2016 Art used

- Art featured by Stanford Art of Neuroscience competition.

Source: Stanford Scope <https://scopeblog.stanford.edu/2016/07/06/art-of-neuroscience-competition-highlights-beauty-of-the-brain/>

