

JOSH BREKEL

Graduate Student, University of Utah

Curriculum Vitae — Updated: September 25, 2025

Location: Salt Lake City

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Personal Summary

I am currently working towards a PhD under the supervision of Jonah Schupbach at the University of Utah. My research primarily focuses on formal epistemology and philosophy of science. Prior to coming to Utah, I taught philosophy at Colorado State University and the University of Northern Colorado. I also worked as a programmer for the USDA-ARS, where I helped develop a Python package called *pyfao56*. In July 2025, *pyfao56* won the **Vanguard Award** for innovation. My time at the USDA-ARS gave me insight into what it is like to be a research scientist, while teaching helped me discover my passion for helping others learn about philosophy, epistemology, and science. I am originally from Northeastern Colorado, and I am a proud first-generation college student.

Specializations	Epistemology Philosophy of Probability Python Programming
Competencies	Philosophy of Science Logic Normative Ethics
Interests	Cognitive Psychology History of Economics American Pragmatism

Notable Awards and Honors

- 2024-5: Best Graduate Student Paper (Utah Philosophy Department)
- 2024: Mizzou Ridgel Doctoral Fellowship (declined admission offer)
- 2018: Ben W. Garcia CSU Economics Merit Scholarship

References

Dr. Jonah Schupbach	Utah
jonah.schupbach@utah.edu	
Dr. Jeff Kasser	CSU
jeff.kasser@colostate.edu	
Dr. Kendall DeJonge	USDA-ARS
kendall.dejonge@usda.gov	
Dr. Ken Shockley	CSU
kenneth.shockley@colostate.edu	

More references available upon request.

Education

University of Utah	
Ph.D. Philosophy	2024—Present
Colorado State University	
M.A. Philosophy	2020—2022
B.A. Economics	2016—2019
B.A. Philosophy	2016—2019

Employment

Graduate TA & Instructor	Aug 2024—Present
University of Utah	Salt Lake City, UT
<ul style="list-style-type: none"><li>FA25: GTA for Professor Elijah Millgram’s Theory of Knowledge Course.</li><li>SU25: As a primary instructor, taught a fully asynchronous online section of Deductive Logic.</li><li>SP25: Graded undergraduate short essays for Feminist Philosophy of Science, taught by Professor Melinda Fagan.</li></ul>	
Adjunct Instructor	Jan 2023—May 2024
Colorado State University	Fort Collins, CO
<ul style="list-style-type: none"><li>Taught five 40-student sections of Moral and Social Problems.</li><li>Taught one 60-student section of Ethical Computing Systems.</li><li>Advised graduate teaching assistants on assignment grading, assignment design, lecturing, and pedagogical strategies.</li></ul>	
Adjunct Instructor	Aug 2023—May 2024
University of Northern Colorado	Greeley, CO
<ul style="list-style-type: none"><li>Taught three 60-student sections of Moral Issues.</li><li>Taught one 35-student section of Philosophy of Science.</li><li>Designed and graded all class lectures, assignments, exams, and papers.</li></ul>	
Data Scientist	May 2022—Jan. 2024
USDA Agricultural Research Service	Fort Collins, CO
<ul style="list-style-type: none"><li>As a GS-06-01, spearheaded a project to transition experimental research data from Excel to Python.</li><li>Contributed to the development of an open-source Python Package designed to codify FAO-56 water-balance equations.</li><li>Used Git, Github, PyCharm, and Jupyter Notebook to efficiently develop scripts and modules in a team environment.</li></ul>	
Graduate Teaching Assistant	Aug 2020—May 2022
Colorado State University	Fort Collins, CO
<ul style="list-style-type: none"><li>Graded undergraduate papers and exams while adhering to outlined grading policies.</li><li>Assisted with the development of paper prompts, exam questions, homework assignments, and rubrics.</li><li>Helped with the development of remote, hybrid, and in-person classes.</li></ul>	
Content Marketing Specialist	May 2019—Mar 2020
Madwire Inc.	Fort Collins, CO
<ul style="list-style-type: none"><li>Wrote an average of 1,500 words per day for use on small business websites.</li><li>Edited various websites (on multiple platforms) on a daily basis.</li><li>Effectively managed a clientele book of over 50 clients.</li></ul>	

Publications

- (1) Brekel, J., “A New Look at Keynesian Weight of Evidence.” *Erkenntnis* (2025).

(2) DeJonge, K. C., Thorp, K. R., Brekel, J., Pokoski, T., and Trout, T. J., “Customizing pyfao56 for Evapotranspiration Estimation and Irrigation Scheduling at the Limited Irrigation Research Farm (LIRF), Greeley, Colorado.” *Agricultural Water Management* 299 (2024): 108891.

(3) Brekel, J., Thorp, K. R., DeJonge, K. C., and Trout, T. J., “Version 1.1.0—pyfao56: FAO-56 Evapotranspiration in Python.” *SoftwareX* 22 (2023): 101336.

(4) Thorp, K. R., Brekel, J., and DeJonge, K. C., “Version 1.2.0 — pyfao56: FAO-56 Evapotranspiration in Python.” *SoftwareX* 24 (2023): 101518.

Presentations

- “A New Look at Keynesian Weight of Evidence”  
10th Biennial Meeting of the European Philosophy of Science Association, Groningen, NL  
Aug 26, 2025

“A Statistical Analysis of Philosophers on Philosophy”  
(with Aaron Nielsen and Jacob Shankles)  
Philosophy Department Lunch Series, Colorado State University, Fort Collins, CO  
Jan 31, 2024

“Saving Water in Arid Climates: How Environment and Plant Status Combine to Determine Crop Water Needs”(with Kendall DeJonge)  
Energy and Environment Seminar Series, Powerhouse Energy Campus, Fort Collins, CO  
Apr 20, 2023

“Streamlining Scheduling: How Python Transforms Water Balance Modeling and Evapotranspiration Estimation”  
43rd Annual AGU Hydrology Days, Colorado State University, Fort Collins, CO  
Mar 21-22, 2023

Awards and Honors

- Recipient, Best Graduate Student Paper Prize, Utah Department of Philosophy  
2024–5

Recipient, Gus T. Ridgel Doctoral Fellowship, Mizzou (declined admission offer)  
2024

Recipient, CSU Liberal Arts Karbula Family Merit Scholarship  
2020

Recipient, Colorado Masons’ Benevolent Fund Merit Scholarship  
2016–9

Recipient, Ben W. Garcia CSU Economics Merit Scholarship  
2018

Recipient, CSU Logan County Alumni Merit Scholarship  
2016, 2018

Recipient, Fleming, CO VFW Merit Scholarship  
2016

Recipient, Laurel Williams Education Scholarship  
2016

Teaching

- GTA, PHIL 3300: Theory of Knowledge  
University of Utah  
FA25  
Type: in-person UG course

Primary Instructor, PHIL 3200: Deductive Logic  
University of Utah  
SU25  
Type: online, asynchronous UG course

Details: Taught one 35-student section. Created video-lectures each week, as well as assignments administered through the Carnap.io logic software. Topics covered include: Syntax of propositional logic, natural deduction for propositional logic, syntax of first-order logic, natural deductive for first-order logic, and translation between English and artificial languages.

GTA, PHIL 3380: Feminist Philosophy of Science  
University of Utah  
SP25  
Type: in-person UG course

Primary Instructor, PHIL 280: Philosophy of Science  
University of Northern Colorado  
SP24  
Type: in-person UG course

Details: Taught one 35-student section of primarily second-semester freshmen. Student population included large proportion of non-traditional students (42% first-generation, 24% Latinx/Hispanic). Topics covered include: Scientific Method, Problem of Induction, Popper and Kuhn, Scientific Explanation, Bayesianism, and Values in Science.

Primary Instructor, PHIL 150: Moral Issues  
University of Northern Colorado  
FA23, SP24  
Type: in-person UG course

Details: Taught three 60-student sections that consisted primarily of freshmen. Student population included large proportion of non-traditional students (42% first-generation, 24% Latinx/Hispanic). Topics covered include: Divine Command Theory, Moral Skepticism, Consequentialism, Deontology, Virtue Theory, Hate Speech, Death Penalty, Euthanasia, Abortion, Animals, Environmental Ethics, Poverty.

Primary Instructor, PHIL/CS 201: Ethical Computing Systems  
Colorado State University  
FA23  
Type: in-person UG course

Details: Co-taught one 60-student section with an instructor from the Computer Science Department. Topics covered include: Virtue

Ethics, Consequentialism, Kantian Ethics, Human Enhancement, Ethical Machines, Hard Problem of Consciousness, Just War, Logic, Extended Mind Hypothesis, Medical Ethics and Consent, Large-Language Model (LLM) Ethics.

Primary Instructor, PHIL 103: Moral and Social Problems

SP23, FA23, SP24

Colorado State University

Type: in-person UG course

**Details:** Taught five total 40-student sections that primarily consisted of non-philosophy freshmen students. Topics covered include: Divine Command Theory, Moral Skepticism, Consequentialism, Deontology, Rights, Virtue Theory, Free Speech, Racism and Policing, Death Penalty, Theories of Justice, Euthanasia, Abortion, Animal Rights, Environmental Ethics, Poverty.

GTA, PHIL 100: Appreciation of Philosophy

FA20, SP21, SP22

Colorado State University

Type: in-person and remote UG courses

GTA, PHIL 120: History and Philosophy of Scientific Thought

FA21

Colorado State University

Type: in-person UG course

Professional Development

Member

May 2025—Present

Philosophy of Statistics Reading Group

Remote

Member

Aug 2024—Present

Philosophy of Science Reading Group

University of Utah

Co-Advisor

May 2023—Jan 2024

Undergraduate Research Project

CSU (Department of Statistics)

- Obtained survey data from David Bourget and David Chalmers.
- Acted as a philosophy consultant on a web application designed to view philosophy survey data.
- Complete web application can be found on this page: <https://survey2020.philpeople.org>

Member

Feb 2019—May 2023

Philosophy of Statistics Book Club

Colorado State University

- Read several books on the history and philosophy of statistics.
- Attended meetings where I discussed statistics with working statisticians, scientists, teachers, professors (from various disciplines), academic administrators, as well as undergraduate and graduate students.

Attendee

Apr 20-21, 2023

Epistemology of Science Workshop

Colorado State University

- Attended and participated in workshop presentations from Jay Odenbaugh, Domenica Romagni, Collin Rice, Soazig Le Bihan, Melinda Fagan, and Kareem Khalifa.

External Reviewer

Oct 2018—May 2019

Stance: An International Undergraduate Philosophy Journal

Remote

- Developed strong writing and editing skills by reviewing over 20 articles for an international undergraduate philosophy journal.
- Learned how to effectively communicate and work with a team in a digital environment.
- Utilized effective research techniques to quickly understand a variety of technical topics.
- Drafted Acceptance, Resubmit, and Rejection letters which were sent to authors.

Co-Manager and Co-Founder

May 2013—May 2016

Logan County Farmer’s Market

Sterling, CO

- Managed social media accounts to market and advertise a new farmer’s market.
- Helped grow the market from its creation to the eventual attainment of a \$10,000 grant.