

Breanna K. Nguyen

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EDUCATION

Yale University, New Haven, CT

Bachelor of Science in Cognitive Science, Certificate in Data Science

Class Marshal, selected to represent the graduating class at 324th Commencement

Aug 2021 — May 2025

Cumulative GPA: 3.71/4.00

RESEARCH EXPERIENCE

Moral Attitudes and Decisions Lab — PI: Walter Sinnott-Armstrong

Durham, NC

Full-Stack Developer (PPP Project)

Sep 2024 — Present

- Designed a tool that acts as a surrogate decision-maker, helping preserve users' care preferences in the event that they are no longer able to communicate their wishes
- Built a full-stack web app (Flask, PostgreSQL, HTML/CSS/JS) to gather end-of-life care preferences
- Worked with clinicians and researchers to turn ethical and psychological ideas into clear, structured survey questions

Senior Research Data Tech

Jun 2024 — Present

- Collaborated with lab members on projects focused on moral decision making and moral artificial intelligence
- Implemented original research ideas using machine learning and natural language processing techniques
- Supported the development of web apps and conducted both quantitative and qualitative data analysis

Experimental Philosophy Group — PI: Joshua Knobe

New Haven, CT

Researcher

Dec 2022 — May 2025

- Developed and implemented research proposal on moral transgressions and perceptions of social desirability
- Worked collaboratively with other lab members on innovative new research projects

Independent Research Project — PI: Lukas Meier

Cambridge, UK

Visiting Student

Feb 2023 — Dec 2023

- Implemented a machine learning algorithm that accurately predicts the verdicts of workplace ethical dilemmas based on a corpus of Reddit posts
- Created a user-interface that uses that algorithm to give predictions on new data
- Earned highest academic honor (first with distinction) at University of Cambridge

EnvironMental Health Group — PIs: Julie Zimmerman and Paul Anastas

New Haven, CT

Data Scientist and Reviewer

Jan 2023 — Feb 2025

- Developed a novel web-based data collection tool to categorize articles and streamline the review process
- Conducted thorough screening of over 9,000 titles and abstracts to assess relevance to research framework
- Created all figures and graphics for the resulting publication

Human Nature Laboratory — PI: Nicholas Christakis

New Haven, CT

Research Assistant

Feb 2023 — Dec 2023

- Conducted data analysis on social network data, specifically in the realm of cognitive social structures
- Comprehensively synthesized information from a literature review on risk attitudes and social cognition

Crockett Laboratory — PI: Molly Crockett

New Haven, CT

Research Assistant

Feb 2022 — Aug 2023

- Rigorously conducted experiments for a project focused on psychophysical methods of measuring subjective experiences
- Actively supported research process by assisting with participant recruitment and data analysis

PUBLICATIONS

In Press

- Keswani, V., Conitzer, V., Sinnott-Armstrong, W., **Nguyen, B. K.**, Schaich Borg, J., & Heidari, H. (2024). Can AI Model the Complexities of Human Moral Decision-making? A Qualitative Study of Kidney Allocation Decisions. *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '25)*. <https://doi.org/10.1145/3706598.3714167>
- Ratjen, L., Goddard, E., Gilcher, E. B., **Nguyen, B. K.**, Backhaus, A., Kelley, M., Akalaonu, K., Feldman, H. S., et al. (2025). EnvironMental Health: A Framework for an Emerging Field at the Nexus of Environment and Mental Health Crises. *GeoHealth*. <http://dx.doi.org/10.1029/2024GH001254>
- **Nguyen, B. K.**, & Yildirim, I. (2024). An Intuitive Physics Approach to Modeling Melodic Expectation. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 46. <https://escholarship.org/uc/item/8ds971xf>

Under Review

- Keswani, V., Cousins, C., **Nguyen, B. K.**, Conitzer, V., Heidari, H., Schaich Borg, J., & Sinnott-Armstrong, W. (2025). Moral Change or Noise? On Problems of Aligning AI With Temporally Unstable Human Feedback. *AAAI Conference on Artificial Intelligence*.

- Mulcrone, D*., **Nguyen, B. K.***, & McKee, P. (2025) Moral Motivation: A Scoping Review Protocol. *Frontiers in Psychology*

In Prep

- **Nguyen, B. K.**, Fuller, M. Sinnott-Armstrong, W., & Murray, S. (2025) The partisan penalty: The effect of partisanship on evaluating reasons for political belief
- **Nguyen, B. K.**, & Yildirim, I. (2025) Probabilistic musical forces model: An Intuitive Physics Approach to Modeling Melodic Expectation.
- **Nguyen, B. K.** & Prinzing, M. (2024). What It Means To Be A True Badass: An Experimental Investigation Of The Ordinary Concept. <https://doi.org/10.31234/osf.io/542na>.

CONFERENCE PRESENTATIONS

- **Nguyen, B. K.**, & Yildirim, I. An Intuitive Physics Approach to Modeling Melodic Expectation. Poster session presented at: the Annual Meeting of the Cognitive Science Society, 2024 Jul 26, Rotterdam, Netherlands.
- **Nguyen, B. K.**, & Prinzing, M. What It Means to Be Badass. Poster session presented at: The Society for Personality and Social Psychology's Annual Convention, 2024 Feb 9, San Diego, CA and The Society for Southeastern Social Psychologists Annual Meeting, 2023 Nov 4, Charlotte, NC.

FELLOWSHIPS & AWARDS

Sigma Xi Grants in Aid of Research (GIAR)	United States
Competitive research award supporting undergraduate and graduate students in the sciences and engineering	May 2025
NSF Graduate Research Fellowship Program (GRFP) Awardee	United States
Prestigious fellowship supporting outstanding students in NSF-supported STEM disciplines (declined award)	Apr 2025
Yale Science and Engineering Association Distinguished Senior Award	New Haven, CT
Recognizes seniors for distinguishing themselves among Yale's STEM undergraduate community	Apr 2025
Mellon Senior Research Grant	New Haven, CT
A research grant for seniors to support their senior projects and independent study	Oct 2024
Yale Summer Experience Award	Durham, NC
A summer fellowship available to undergraduates receiving financial aid	Mar 2024
Poster Award Runner-up	Charlotte, NC
Award presented at the Annual Meeting for the Society of Southeastern Social Psychologists	Nov 2023
International Study Award	Cambridge, England
A summer fellowship available to undergraduates receiving financial aid	May 2023
Ezra Stiles Richter Fellowship	New Haven, CT
Residential college award for independent study and research	Apr 2022, Apr 2023
Gary Stein Fellowship	New Haven, CT
Merit-based award for a project of research aimed at bringing about scientific practical effect	Apr 2022, Apr 2023
John E. Linck and Alanne Headland Linck Fellowship	New Haven, CT
Merit-based award for a project of personal educational value	Apr 2022, Apr 2023, Apr 2024

SKILLS

- **Tools:** GitHub, VS Code, Qualtrics, Prolific, NVivo
- **Programming:** R, Python, Julia, SQL, HTML/CSS, Flask
- **Data Science:** statistical inference and modeling, experimental design and causal inference, data processing and visualization
- **Machine Learning:** supervised and unsupervised algorithms, deep learning architectures, natural language processing, dimensionality reduction, model selection and cross-validation

OTHER EXPERIENCES

- **Volunteering:** Student Advisor for Yale Undergraduate Admissions (2024-2025), Mentor for Project Access (2023-2024), English Tutor for Bridges ESL (2022-2024), Teacher for Splash at Yale (2024), Big Sib and Student Activity Committee member for Ezra Stiles College (2022-2025), Panelist for the Rural Students Association at Yale (2025), Yale Model United Nations Chair (2025), Club Sports Advisory Board (2021-2024)
- **Study Abroad:** Completed three summer courses as a visiting student at University of Cambridge's Pembroke Summer Programme (Summer 2023)
- **Leadership:** Re-founded and led as president of Yale Powerlifting, increasing club membership by hundreds, tripling participation of female competitors, and ensuring equal funding between men's and women's sports as a club sports advisory board member (2021-2022)