

Nikolas McNeal

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EDUCATION

The Ohio State University

B.A. with Honors Research Distinction, Computer Science

Graduation Expected: May 2023

Columbus, Ohio

August 2019 - Present

Cumulative GPA: 3.8/4.0

HONORS AND AWARDS

Ohio State University Eminence Fellowship, full cost-of-attendance merit award given to 25 incoming freshmen

Stamps Scholarship, full cost-of-attendance merit award given to five incoming freshmen

OSU Undergraduate Research Scholarship (2021), university undergraduate research award

OSU Decision Sciences Collaborative Scholarship (2021), university computational psychology research award

PROFESSIONAL EXPERIENCE

The Ohio State University, Department of Computer Science

Research Intern, *advised by Professor Huan Sun*

October 2021 - Present

Columbus, Ohio

Northwestern University, Department of Music

Research Intern, *advised by Professor Daniel Shanahan*

July 2021 - Present

Remote

Carnegie Mellon University, Department of Computer Science

Research Intern, *advised by Professor Tai Sing Lee*

May 2021 - Present

Remote

The Ohio State University, Department of Psychology

Research Intern, *advised by Professor Ian Krajbich*

December 2019 - Present

Columbus, Ohio

TEACHING

Quantitative Neuroscience, Teaching Assistant

Math 4350

Spring 2023

The Ohio State University

PREPRINTS

[1] **McNeal, N.**, Huang, J, Umoren, A., Dai, S., Dannenberg, R., Randall, R., Lee, T.S. (2022) *Relating Musicality and Preferability to Prediction in a Predictive Coding Model*. Submitted.

PUBLICATIONS

[1] Gutierrez, B.J., **McNeal, N.**, Washington, C., Chen, Y., Li, L., Sun, H., Su, Y. (2022). *Thinking About Using GPT-3 for Biomedical Information IE? Think Again*. Findings of the 2022 Conference on Empirical Methods in Natural Language Processing (**EMNLP**) 2022. Presented in: Abu Dhabi, United Arab Emirates

CONFERENCE PRESENTATIONS

[1] Shanahan, D., Kang, J., **McNeal, N.** (2023, August 24-28). *Understanding the Role of Schematic Knowledge in the Preference for Harmonic Asymmetry with Iterative Learning*. 17th International Conference on Music Perception and Cognition (**ICMPC**), Tokyo, Japan. Accepted. **[Oral]**

[2] **McNeal, N.**, Shanahan, D. Kang, J., Hay, N. (2022, August 4-7). *Iterative Learning Suggests a Preference for Harmonic Asymmetry*. Society for Music Perception and Cognition (**SMPC**). Portland, Oregon. **[Oral]**

[3] **McNeal, N.**, Shevlin, B., Krajbich, I. (2022, July 27-30) *What causes enhanced processing of high-value items?* 44th Annual Meeting of the Cognitive Science Society (**CogSci**). 2022 July; Toronto, Canada.

[4] **McNeal, N.**, Umoren, A., Huang, J., Lee, T.S. (2021, August 6). *Unsupervised Musicality Prediction of Pitch Sequences*. CMU-Pitt Center of Neural Basis of Cognition's Undergraduate Program in Neural Computation. Pittsburgh, Pennsylvania

[5] Umoren, A., **McNeal, N.**, Lee, T.S. (2021, August 6). *Probing PredNet's Internal Representations using Feature Visualization*. CMU-Pitt Center of Neural Basis of Cognition's Undergraduate Program in Neural Computation. Pittsburgh, Pennsylvania.