Nikolas McNeal

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EDUCATION

Georgia Institute of Technology
Ph.D., Machine Learning

Atlanta, Georgia
2023 - Present

Ohio State University
B.A., Computer Science

Columbus, Ohio
2019 - 2023

HONORS AND AWARDS

OSU CSE Undergraduate Research Award (2023), departmental computer science research award

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

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

Stamps Scholarship (2019), full cost-of-attendance merit award given to five incoming freshmen

Ohio State University Eminence Fellowship (2019), full cost-of-attendance merit award given to 25 incoming freshmen

PROFESSIONAL EXPERIENCE

The Ohio State University, Department of Computer Science
Research Intern, *advised by Professors Huan Sun and Yu Su*

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

Differential Equations, Teaching Assistant
    Math 2552

Autumn 2023
Georgia Institute of Technology

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.