

Virginia E. Strehle

Contact

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Vanderbilt University
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Nashville, TN 37235

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RESEARCH EXPERIENCE

Research Assistant, Tong Lab

Advisor: Frank Tong, Ph.D.

Vanderbilt University

August 2024 -

Current

Lab manager, Cognitive and Computational Neuroscience Lab

Advisor: Jiahui Guo, Ph.D.

The University of Texas at Dallas, School of Behavioral and Brain Sciences

February 2024 -

July 2024

Research assistant, The Face Perception Research Lab

Advisor: Alice O'Toole, Ph.D.

The University of Texas at Dallas, School of Behavioral and Brain Sciences

October 2020 -

December 2023

Research Assistant/Lab manager, The Infant Learning Project

Advisor: Melanie Spence, Ph.D.

The University of Texas at Dallas, School of Behavioral and Brain Sciences

Lab manager from Spring 2021-Fall 2022

January 2020 -

December 2022

EDUCATION

Ph.D. Cognition and Cognitive Neuroscience

Vanderbilt University

August 2024 -

Current

M.S. Applied Cognition and Neuroscience

The University of Texas at Dallas, School of Behavioral and Brain Sciences.

Specialization: Computational Modeling/Intelligent Systems

June 2022 -

December 2023

B.S. Psychology

The University of Texas at Dallas, School of Behavioral and Brain Sciences

Honors thesis: Deeper levels of processing improve recognition accuracy for inverted faces.

August 2019 -

May 2022

HONORS AND AWARDS

University Graduate Fellowship (\$5000/year for 3 years) Vanderbilt University, Graduate School	<i>August 2024</i>
Student Leadership Award The University of Texas at Dallas, School of Behavioral and Brain Sciences	<i>May 2022</i>
Major Honors in Psychology The University of Texas at Dallas, School of Behavioral and Brain Sciences	<i>May 2022</i>
Latin Honors (<i>magna cum laude</i>) The University of Texas at Dallas, School of Behavioral and Brain Sciences	<i>May 2022</i>
UTD Institutional Review Board HIVE Award (link) The University of Texas at Dallas, Office of Research and Innovation	<i>Spring 2022</i>
Undergraduate Research Scholarship Award (\$800) The University of Texas at Dallas, Office of Undergraduate Education	<i>Fall 2021</i>
University of Buffalo exploreCSR Research Grant (\$1,000)	<i>Spring 2021</i>

PUBLICATIONS AND MANUSCRIPTS

- Strehle, V.E.**, Bendiksen, N.K., & O'Toole, A.J. (2023). Deep convolutional neural networks are sensitive to configural properties of faces. (*Under revision*). <https://psyarxiv.com/xu4sm/>
- Parde, C. J., **Strehle, V.E.**, Banerjee, V., Hu, Y., Cavazos, J., Castillo, C. D., & O'Toole, A. J. (2023). Twin identification over viewpoint change: A deep convolutional neural network surpasses human. *ACM Transactions on Applied Perception*, 20(3), 1-15. <https://doi.org/10.1145/3609224>

CONFERENCE PRESENTATIONS

- Strehle, V.E.**, Bendiksen, N.K., & O'Toole, A.J. (May 2023). Deep convolutional neural networks are sensitive to configural properties of faces. *Journal of Vision*, 23(9), 5560-5560. <https://doi.org/10.1167/jov.23.9.5560>
- Strehle, V.E.** & Spence, M.J. (March 2023). Deeper levels of processing improve recognition accuracy for inverted faces. *Presented at the annual conference of the Southwestern Psychological Association*, Frisco, TX, 2023.
- Razvi, S., Hale, M., **Strehle, V.E.**, Hernandez, I.B., Davis, H.W., & Spence, M.J. (March 2023). Infants' Perception of Faces and Speech: A Web-Based Study. *Presented at the annual conference of the Southwestern Psychological Association*, Frisco, TX, 2023
- Parde, C. J., **Strehle, G.**, Banerjee, V., Hu, Y., Cavazos, J. G., Castillo, C. D., & O'Toole, A. J. (May 2022). Comparing human and deep convolutional neural network performance on

twin identification. *Journal of Vision*, 22(14), 3357-3357.
<https://doi.org/10.1167/jov.22.14.3357>

Roberts, A., Razvi, S., Rehman, S., Hale, M., Mickelsen, M., **Strehle, G.**, ... & Spence, M. J. (April 2021) Exploring the Relationship Between Mental-State Language and Children's Early Vocabulary Development. *Presented at the virtual Society for Research in Child Development Biennial Meeting*, 2021.

INVITED TALKS

Strehle, V.E., Bendiksen, N.K., & O'Toole, A.J. (12 April, 2023). Deep convolutional neural networks (DCNNs) are sensitive to face configuration. *Different Minds Collaborative 2023 Trainee Conference*. Hosted remotely by University of Victoria, organized by Jim Tanaka.

TEACHING EXPERIENCE

Graduate TA, Cognitive Science *Fall 2023*
The University of Texas at Dallas, School of Behavioral and Brain Sciences
Professor: Alice O'Toole, Ph.D.

Graduate TA, Molecular Neuroscience *Fall 2022*
The University of Texas at Dallas, School of Behavioral and Brain Sciences
Professor: Rukhsana Sultana, Ph.D.

Undergraduate TA, Honors Cognitive Science *Spring 2022*
The University of Texas at Dallas, School of Behavioral and Brain Sciences
Professor: Alice O'Toole, Ph.D.

TECHNICAL SKILLS

- Python
- R
- PsychoPy
- SPSS