

Daniel Guest

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🌐 <https://guestdaniel.github.io/>

Education

- 2017 – ... **Ph.D., University of Minnesota**, Psychology
Thesis title: *Pitch perception of concurrent complex tones at high frequencies*
- 2013 – 2017 **B.S., The University of Texas at Dallas**, Psychology

Research

University of Minnesota

- 2017 – ... Auditory Perception and Cognition Lab (Andrew Oxenham)
2018 – ... Computational Visual Neuroscience Lab (Kendrick Kay)

The University of Texas at Dallas

- 2015 – 2017 Speech Perception Lab (Peter Assmann)

Awards

National Institutes of Health

- 2020 – ... F31 Ruth L. Kirschstein Predoctoral Individual National Research Service Award
Title: *Processing of complex sounds at high frequencies*

University of Minnesota

- 2017 – ... College of Liberal Arts Graduate Fellowship
2018 – 2020 NSF-NRT Graduate Training Program in Sensory Science Fellowship
2018 Department of Psychology Graduate Summer Research Fellowship

National Science Foundation

- 2018 Graduate Research Fellowship Program, Honorable Mention

Professional experience

Oticon A/S

- 2019 Research intern in Augmented Hearing, Eriksholm Research Center
Supervisor: Lars Bramsløw

Teaching

University of Minnesota

- 2021 Guest lecturer, Osher Lifelong Learning Institute Course “Normal and Abnormal Perception: How Senses Shape Experience”
Lecture topic: *The science of hearing loss*
- 2018 – 2019 Guest lecturer, Introduction to Biological Psychology (PSY 3061)
Lecture topic: *Audition*

Publications and presentations

Journal Articles

- Kapolowicz, M. R., **Guest, D. R.**, Montazeri, V., Baese-Berk, M. M., & Assmann, P. F. (2021). Effects of spectral envelope and fundamental frequency shifts on the perception of foreign-accented speech. *Language and Speech*. In press.
- Guest, D. R.**, & Oxenham, A. J. (2019). The role of pitch and harmonic cancellation when listening to speech in harmonic background sounds. *The Journal of the Acoustical Society of America*, 145(5), 3011–3023. [doi:10.1121/1.5102169](https://doi.org/10.1121/1.5102169)

Talks

- Guest, D. R.**, Allen, E., Wu, Y., Naselaris, T., Arcaro, M., & Kay, K. N. (2021). Evidence for a ventral visual stream in the pulvinar. Contributed talk presented at VSS 2021 (virtual).
- Guest, D. R.**, & Oxenham, A. J. (2019). Pitch perception of concurrent high-frequency complex tones. Invited talk presented at ASA 2019 Louisville. [doi:10.1121/1.5101520](https://doi.org/10.1121/1.5101520)

Posters

- Guest, D. R.**, & Oxenham, A. J. (2021). Fundamental frequency discrimination in mixtures of high-frequency complex tones: Data and ideal-observer model predictions. Poster presented at ARO 2021 (virtual).
- Guest, D. R.**, & Oxenham, A. J. (2020). Modeling pitch perception of concurrent high-frequency complex tones with auditory nerve simulations. Poster presented at ARO 2020.
- Guest, D. R.**, & Oxenham, A. J. (2020). Perception of melody and triads at high frequencies. Poster presented at ASA 2020 (virtual). [doi:10.1121/1.5146799](https://doi.org/10.1121/1.5146799)
- Guest, D. R.**, & Oxenham, A. J. (2019). Pitch perception of concurrent high-frequency complex tones. Poster presented at ARO 2019.
- Guest, D. R.**, & Oxenham, A. J. (2019). Pitch perception of concurrent high-frequency complex tones: Modeling behavior with auditory nerve simulations. Poster presented at ISAAR 2019.
- Guest, D. R.**, & Oxenham, A. J. (2018). The role of pitch and harmonic cancellation in simultaneous speech segregation. Poster presented at 2018 UMN Center for Cognitive Science Spring Research Day.
- Guest, D. R.**, & Oxenham, A. J. (2018). The role of pitch and harmonic cancellation when listening to speech in background sounds. Poster presented at ASA 2018 Victoria. [doi:10.1121/1.5068208](https://doi.org/10.1121/1.5068208)
- Kapolowicz, M. R., **Guest, D. R.**, Montazeri, V., Baese-Berk, M. M., & Assmann, P. F. (2018). Perception of spectrally-shifted non-native speech. Poster presented at ASA 2018 Victoria. [doi:10.1121/1.5068208](https://doi.org/10.1121/1.5068208)
- Guest, D. R.** (2017). Perception of voice gender in children's voices by cochlear implant users. Poster presented at 6th UT Dallas Annual Exhibition of Excellence in Undergraduate Research.
- Guest, D. R.**, Montazeri, V., Kapolowicz, M. R., & Assmann, P. F. (2017). Perception of voice gender in children's voices by cochlear implant users. Poster presented at ASA 2017 Boston. [doi:10.1121/1.4988543](https://doi.org/10.1121/1.4988543)

- Kapolowicz, M. K., **Guest, D. R.**, Montazeri, V., & Assmann, P. F. (2017). Effect of frequency shifts on talker recognition in native and foreign-accented speech. Poster presented at ASA 2017 New Orleans. [doi:10.1121/1.5014953](https://doi.org/10.1121/1.5014953)
- Guest, D. R.** (2016). Perception of voice gender in cochlear implant simulations of children's speech. Poster presented at the 5th UT Dallas Annual Exhibition of Excellence in Undergraduate Research.
- Guest, D. R.**, Kapolowicz, M. R., Hossain, S., Montazeri, V., & Assmann, P. F. (2016). Perception of voice gender in cochlear implant simulations of children's speech. Poster presented at ASA 2016 Salt Lake City. [doi:10.1121/1.4950328](https://doi.org/10.1121/1.4950328)

Professional service

Acoustical Society of America

- 2019 Co-organized "Guidance from the Experts: Applying for Grants and Fellowships" special panel session at ASA San Diego
- 2018 – 2020 Student Council Representative (Psychological and Physiological Acoustics)

University of Minnesota

- 2019 – ... Graduate Student Representative (Cognitive and Brain Sciences)

Skills

Computers	bash, git, L ^A T _E X, Linux
Languages	English (native), Spanish, Portuguese
Mathematics	Differential equations, linear algebra, multivariable calculus, real analysis
Programming languages	Python (proficient), R (proficient), MATLAB (proficient), Julia (familiar)
Statistics	Bayesian statistics, estimation theory, generalized linear regression, multilevel/hierarchical regression, neural networks, probability theory