Angie Nikoleychuk

Education

Current

M.Sc./PhD, McMaster University, Hamilton, Ontario, Canada

2025 - Present

• **Research Topics:** Amplitude envelope and its role in annoying sounds, the Schutz-Lipscomb Illusion.

GPA: 3.57

B.Sc. in Psychology, University of Lethbridge, Lethbridge, Canada

2015 - 2024

 Honours Thesis: "Music, contextual cues and sequences," under the supervision of Dr. Louise Barrett, Dr. David Logue, & Dr. Bryn Hughes (June 2024).

How does music and sound affect our ability to recall and reproduce sequences? Can we relate specific sounds to specific information or processes? I used a modified, audio-based go/no-go task to find out.

Research Interests

Psychophysics/Psychoacoustics

What is it about a sound that makes it annoying? What we see affects how long we perceive a sound to be. Why? And how does it work? What strategies and mechanisms do we use when we hear a non-harmonic sound?

Humans and Technology

How do sounds and music affect how we use smartphones, play games, and interact with technology? Can we make use of that to improve the effectiveness of our technology?

Decision-Making and Judgement

How does music influence cognitive processes and affect how we learn, know, and communicate? How do we perceive silence? We have sound illusions, but what about silence illusions?

Data Analysis and Statistics

Turning data chaos into actionable answers and a deeper understanding of the world around us.

Course Projects

- Independent Study, PSYC 4990 Exploring Quality of Life in a Psychological Context: "Quality of life assessments, autistic populations and methodology: A better quality of life is only an illusion," under the supervision of Dr. Louise Barrett (June 2023). I explored how quality of life surveys are built, administered, and used, identifying strengths, weaknesses, and how they can go wrong.
- Independent Study, NEUR 3990 Functional Design, Cognition, and Decision-Making: "Cognitive disabilities, technological flexibility and the NIH Toolbox Cognitive Battery: a literature review" under the supervision of Dr. Robbin Gibb (June 2022).
 I learned about the development of the digital cognitive assessment tool, its sensitivity, and what makes it effective to determine how it could be gamified.
- Independent Study, PSYC 2990 Cognition and Functional Design: "Autism, iPads & interaction: designing technology for independence & inimitable minds," under the supervision of Dr. John Vokey (Spring 2017). Based on the work of Don Norman and James Gibson, I examined what needs autistic individuals have and how technology could help overcome them.
- PSYC 3850 Psychology of Creativity & Innovation

 The Effects of Competition on Improvisers' Motivation, Stress, and Creative Performance:

A Reaction Paper A reaction paper discussing the effect of competition on creativity in music, where the study falls short, and variables that may have been overlooked.

- NEUR 3655 Cognitive Neuroscience II

 Synopsis of "Preserved Neural Correlates of Priming in Old Age and Dementia" by Cindy
 Lustig and Randy L. Buckner (2004) A summary of a paper examining the neural correlates
 of priming in individuals with cognitive decline.
- PSYC 3400 Methods, Statistics & Design
 Are Dollars Driving Degrees in the United States? A simple project demonstrating my understanding of R, Python, Bayesian models, and data analysis.
- PSYC 3850 Consumer Psychology

The Gap Rebrand: Why It Failed & How To Move Forward The Gap clothing brand failed spectacularly in 2010 to launch a new logo. In this class paper, I explored why the rebrand failed and suggested how they can do it right next time using foundational principles of marketing and psychology.

Skills

Music Performance

27 years as an oboist Private tutor Composer Clinician

Data Analysis & Statistics

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Machine Learning

Bayesian modeling

R, Python, JavaScript

MySQL, Tableau, Excel

Survey sampling & methodology

Statistical analysis

Digital Marketing & Consumer Psychology

CSS, PHP, HTML

Project management

Personas and strategy

Conversion optimization

Consumer decision-making

Search Engine Optimization (SEO)

Honors & Awards

- Letter of Recognition University of Lethbridge Faculty Association for student leadership and initiatives undertaken throughout 2021-2022 year.
- Best Undergraduate Student Poster Award 2017 I-CYS Institute for Child and Youth Studies "Autism, iPads & Interaction: Designing Technology for Independence & Inimitable Minds."
- **2017** Philip North Scholarship (\$1,000).
- 2017 StudentWise Bursary (\$500).
- 2016-2017 Bill Chapman Certificate of Distinction University of Lethbridge Students Union - recognizing "a substantial and innovative initiative benefiting students" for my work on student transit and transportation (\$200).
- **2016** Philip North Scholarship (\$1,000).
- o 1996, 1997, 1998, 1999 Music Performance Awards & Recognition
 - First Place Concerto/Concerted Work for Woodwind (\$100).
 - First Place National Senior Woodwind Open (\$1000).
 - First Place National Woodwind Senior & Intermediate (\$500).
 - Outstanding Music Camper Award for Achievement & Leadership.

Published Papers

Leung, B., Kelley, H., Nikoleychuk, A., Kirk, G., Shahrabi, F., Hecker, V., & Schaaf, N. (2024). Building Relationships, Forming Collaborations: Lessons Learned From an Unconference Seeking to Cultivate Solutions in Healthcare. *Health Expectations*, 27. https://doi.org/10.1111/hex.70021

Industry Reports

- Leung, B., Nikoleychuk, A., Kirk, G., Kelley, H., Hecker, V., Shahrabi, F. S., "CHRISA Unconference: Utilizing unconference models to explore and solve complex issues in the healthcare industry," CHRISA Unconference 2023, Lethbridge, Alberta, Canada, 2023, Conference workshop paper (In progress) (Contributing author).
- Steele, B., Nikoleychuk, A., Benito, B., Bobita, P., Morton, K., Villarica, A., "State of SEO 2023," from Search Engine Journal (Survey design & data analysis).
- Nikoleychuk, Angie, Petrosyan, Vahan, "How Do Ads Affect Website Visitor Behavior?"
 from Search Engine Journal (Experiment design, data analysis, presentations, & reports).
- Steele, B., Nikoleychuk, A., Benito, Bobita, P., Biong, R., Walsh, S., Petrosyan, V., Southern, M., "State of SEO 2022," from Search Engine Journal (Data analysis).

Activities

- o Behavioural Science for Smarter SEO, SEOCharity, June 4, 2025 (Speaker)
- 20th Annual NeuroMusic Conference: Thinking About the Future of Music Neuroscience, Hamilton, Ontario, October 1-2, 2024 (Attendee)
- Society for Music Perception 2024 Conference, Banff, Alberta, July 25-27, 2024 (Attendee)
- o 19th Annual Hybrid NeuroMusic Conference: Rhythm, Expectation and Emotion, Hamilton, Ontario, October 28, 2023 (Attendee).
- The 26th ACM Conference On Computer-Supported Cooperative Work And Social Computing (CSCW'23), Minneapolis, MN, October 14-18, 2023 (Attendee).
- Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS) 2024,
 Guelph, Ontario, July 17-19, 2023 (Attendee).
- Collaborative Health Research Institute of Southern Alberta (CHRISA) Unconference, Lethbridge, AB, May 2023 (Attendee).
- Data Visualization with Kevin Hartman, Chief Analytics at Google, September October 2022 (Course).
- The 37th Meeting of the Banff Annual Seminar in Cognitive Science (BASICS), Banff, Alberta, May 4-5, 2018 (Attendee).
- The 36th Meeting of the Banff Annual Seminar in Cognitive Science (BASICS), Banff, Alberta, May 6-7, 2017 (Attendee).
- Introductory Managerial Case Competition, University of Lethbridge, Lethbridge, Alberta, March 5-6, 2016 (Participant).
- Live SEO Audits: Quick Wins and Opportunities, Wix.com, Inc., October 17, 2023 (Virtual, Speaker).
- How to Run Website Experiments, Search Engine Journal, October 11, 2023 (Virtual, Presenter).

 How to Become an Accidental Activist, WGST 2600 - Activism and Advocacy, University of Lethbridge, October 2022 (Guest Lecturer).

Professional Experience

- Search Engine Journal, Behavioural Data Analyst and Content Marketing Manager, Boca Raton, Florida (August 2021 to present)
 - Research, data analysis, and strategy
 - Reader persona research, development, and implementation
 - Presentations and reporting
 - Content promotion and management
 - Social media marketing, strategy, and promotion
- Angie's Copywriting, Owner and Senior Consultant, Maple Creek, Saskatchewan (August 2004 to August 2021)
 - Consumer behaviour and conversion optimization
 - Marketing strategy
 - Search Engine Optimization (SEO)
 - Content, websites, and advertising

Memberships

- MIMMersion McMaster Institute for Music and the Mind (Grad Committee Member/Organizer)
- APA/CPA American/Canadian Psychological Association (Member).
- **CSBBCS** Canadian Society for Brain, Behaviour, and Cognitive Science (Member).
- **ACM** Association for Computing Machinery (Member).
- **SIGCHI** ACM Special Interest Group on Computer-Human Interaction (Member).
- **SMPC** Society for Music Perception and Cognition (Member).

Interests

Music: Learning new instruments, composition, and blending music with video, graphics, and other elements.

Automation: Home automation DIY and how everyday objects are designed.

Outdoors: Geocaching, camping, fishing, and hiking.

References

Or. John Vokey

Department of Psychology, Professor Emeritus Faculty of Arts & Science University of Lethbridge Lethbridge, Alberta, Canada vokey@uleth.ca

Dr. Louise Barrett

Department of Psychology, Professor Faculty of Arts & Science University of Lethbridge Lethbridge, Alberta, Canada louise.barrett@uleth.ca

o Dr. Richard Mueller

Department of Economics, Professor Faculty of Arts & Science University of Lethbridge Lethbridge, Alberta, Canada richard.mueller@uleth.ca

Dr. Jennifer Williams

Department of Psychology, Associate Chair Faculty of Arts & Science University of Lethbridge Lethbridge, Alberta, Canada j.williams@uleth.ca