

Shannon Proksch

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www.shannonproksch.com

EDUCATION

PhD Cognitive and Information Sciences	est. grad. 2022
University of California, Merced Advisor: Prof. Ramesh Balasubramaniam	
MSc, Mind, Language and Embodied Cognition	2017
with Distinction The University of Edinburgh	
BA, Music, minors Philosophy & Psychology	2015
Summa Cum Laude, Honors Program Graduate with Thesis Defense Texas A&M University – Corpus Christi	
Certificate, Teaching English to Speakers of Other Languages	2015
Texas A&M University – Corpus Christi	
Seven-week French Language Immersion Program	2013
Middlebury College, Vermont	

ADDITIONAL TRAINING

Neuromatch Academy Computational Neuroscience Summer School	2020
American Psychological Association Advanced Training Institute: Nonlinear Methods for Psychological Science, University of Cincinnati, Ohio	2019
Spring School Language and Music in Cognition: Integrated Approaches to Cognitive Systems, Universität zu Köln, Cologne, Germany	2019
Linear Models and Mixed Models with R, University of Edinburgh (Instructor: Bodo Winter)	2017

AWARDS & SCHOLARSHIPS

NSF Research Traineeship (NRT) Fellowship- Intelligent Adaptive Systems <i>UC Merced</i>	Fall 2021-Summer 2022
NSF Research Traineeship (NRT) Fellowship- Intelligent Adaptive Systems <i>UC Merced</i>	Fall 2019-Summer 2020
NRT Interdisciplinary Computational Graduate Education Program <i>UC Merced</i>	Spring 2019
Graduate Dean's Recruitment Fellowship <i>UC Merced</i>	Fall 2018-Summer 2019
Highly Commended Dissertation Prize <i>University of Edinburgh</i>	October 2017
Conference Travel Funding Award (<i>University of Edinburgh; for presentation at the 6th Dubrovnik Conference on the Philosophy of Art</i>)	April 2017

PUBLICATIONS

- Proksch, S.** Comstock, D. C., Médé, B., Pabst, A., Balasubramaniam, R. (2020). Motor and predictive processes in auditory beat and rhythm perception. *Frontiers in Human Neuroscience, Cognitive Neuroscience*. 14:578546. doi: 10.3389/fnhum.2020.578546
- Holbrook, C., Iacoboni, M., Gordon, C., **Proksch, S.**, Balasubramaniam, R. (2020). Posterior medial frontal cortex mediates threat-enhanced religious belief: A replication and extension study. *Social Cognitive and Affective Neuroscience*, nsaa153. doi: 10.1093/scan/nsaa153
- Proksch, S.** (2017). Interoceptive inference and emotion in music: Integrating the neurofunctional 'Quartet Theory of Emotion' with predictive processing in music-related emotional experience. *Journal of Cognition and Neuroethics*, 5(1): 101-125.
- Proksch, S.** (2017). *Integrating the neurofunctional 'Quartet Theory of Emotion' with predictive processing in music-related emotional experience*. (Unpublished master's dissertation). The University of Edinburgh, Edinburgh, Scotland.
- Proksch, S.** (2015). *Music and language: Evolutionary and cognitive perspectives*. (Unpublished BA Honors Thesis). Texas A&M University-Corpus Christi, Corpus Christi, Texas.
- Proksch, S.** (2014). *Music and language in the mind: Intention, structure, and perception*. (Unpublished BA Thesis). Texas A&M University-Corpus Christi, Corpus Christi, Texas.

PREPRINTS & SUBMISSIONS

- Holbrook, C., Iacoboni, M., Gordon, C., **Proksch, S.**, Makhfi, H., & Balasubramaniam, R. (2021, March 19). Posterior Medial Frontal Cortex Regulates Sympathy: A TMS Study. doi: 10.31234/osf.io/hduac
- Proksch, S.**, Reeves, M., Balasubramaniam, R., & Spivey, M. (2021, January 25). Coordination Dynamics of Multi-Agent Human Interaction. doi: 10.31234/osf.io/nz4g2
- Pouw, W., **Proksch, S.**, Drijvers, L., Gamba, M., Holler, J., Kello, C., Schaefer, R., Wiggins, G. (2020, December 18). Rhythmic interaction when communication goes multi-modal. <https://doi.org/10.31219/osf.io/psmhn>
- Moser, C., Ackerman, J., Dayer, A., **Proksch, S.**, Smaldino, P.E. (*in press*) Why don't cockatoos have war songs? [commentary on Mehr et al. and Savage et al.] *Behavioral and Brain Sciences*.

CONFERENCE PRESENTATIONS

- Proksch, S.**, (November 2019). Synchrony and the Markov Blankets of Multi-Agent Human Interaction. Talk presented at the *Timescales of Life and Mind: Interdisciplinary Conference on Timescales as a Methodological Approach to Predictive Processing and the Free Energy Principle*, Edinburgh, Scotland.
- Ross, J. M., **Proksch, S.**, Iversen, J.R., Balasubramaniam, R. (August 2019). Down-regulation of left posterior parietal cortex impairs musical phase shift detection in subjects with good perceptual acuity for phase timing. Poster presented at the *Biennial Meeting of the Society for Music Perception and Cognition*. New York City, USA.

- Ross, J. M., **Proksch, S.**, Iversen, J.R., Balasubramaniam, R. (July 2019). Down-regulation of left posterior parietal cortex impairs musical phase shift detection in subjects with good perceptual acuity for phase timing. Poster presented at *Synchrony and Rhythmic Interaction: From Neurons to Ecology Lorentz Workshop*, Leiden, Netherlands.
- Proksch, S.**, Booth, L., Dayer, A., Reeves, M., Spivey, M. (June 2019). Online and In Sync? Bodily synchrony & interpersonal closeness in audiovisual communication. Poster presented at the *American Psychological Association Advanced Training Institute on Nonlinear Methods for Psychological Science*, Cincinnati, Ohio.
- Ross, J. M., **Proksch, S.**, Iversen, J.R., Balasubramaniam, R. (March 2019). Hemispheric differences in parietal contributions to auditory beat perception. Poster presented at *Cognitive Neuroscience Society 2019 Annual Meeting*, San Francisco, California.
- Proksch, S.**, Ross, J. M., Balasubramaniam, R. (February 2019). Hemispheric differences in parietal contributions to auditory beat perception. Poster presented at *Spring School 2019 Language and Music in Cognition: Integrated Approaches to Cognitive Systems*, Cologne, Germany.
- Proksch, S.** (November 2017). Interoceptive inference and emotion in music: Integrating the neurofunctional ‘Quartet Theory of Emotion’ with predictive processing in music-related emotional experience. Poster presented at *Expecting Ourselves: Prediction, Action, and the Embodied Mind*, Edinburgh, United Kingdom, November 2017.
- Proksch, S.** (November 2017). Grounding musical entrainment and social cohesion in sensorimotor contingencies. Talk presented at the *Worlding the Brain Conference*, Amsterdam, Netherlands.
- Proksch, S.** (August 2017). Interoceptive inference and emotion in music: Integrating the neurofunctional ‘Quartet Theory of Emotion’ with predictive processing in music-related emotional experience. Talk presented at the *Mind and Brain Annual Conference*, Flint, MI.
- Novelli, N. & **Proksch, S.** (April 2017). The limitations of music making machines. Talk presented at the 6th *Dubrovnik Conference on the Philosophy of Art*, Dubrovnik, Croatia.

OTHER PRESENTATIONS

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| Achievement Rewards for College Scientists Foundation | March 2021 |
| Presented to the ARCS Northern California Chapter | |
| Topic: Overview of my music/brain work, & graduate student life at UC Merced | |
| Guest Lecturer – University of North Carolina, Charlotte | January 2021 |
| Presented to undergraduate music students of the UNC-Charlotte Wind Bands | |
| Lecture Topic: Neuroscience, Music, & Emotion | |
| Workshop Leader – Professional Development Event | October 2020 |
| Led an interactive workshop for the Cognitive & Information Sciences Graduate Student Group | |
| Workshop Topic: Giving Effective Presentations at Online Conferences | |
| Guest Lecturer – COGS 001, Intro to Cognitive Science | July 2020 |
| Lecture Topic: Neuroscience and Music | |
| RadioBio GradStory | March 2020 |
| Interviewed by RadioBio, a graduate student run podcast, during UC Merced’s Research Week | |
| Interview topic: Rhythms in Brains and Interacting People. | |

Cognitive Science Student Association Symposium	December 2019
Outreach event sharing graduate student cognitive science research with undergraduate students	
Talk title: On Music & Artificial Intelligence: The limitations of music-making machines	
Edinburgh Music Psychology Research Reading Group	Spring 2017
Organized and led discussion for three reading group sessions on:	
Introduction to music and predictive processing	
Emotion in music and predictive processing	
Rhythm in music and predictive processing	

TEACHING EXPERIENCE

Instructor of Record – PHIL / COGS 110, Philosophy of Cognitive Science	Summer 2021
University of California, Merced	
Teaching Assistant – PHIL / COGS 110, Philosophy of Cognitive Science	Spring 2021
University of California, Merced	
Teaching Assistant – COGS 140, Perception and Action	Fall 2020
University of California, Merced	
English Second Language Instructor	Nov 2016—May 2018
E-Joy English Online Language School, Beijing, China	
Elementary Music and English Second Language Instructor	Feb 2016—June 2016
Ameri-Can International Academy, CIBT Education Group, Weifang, China	
Grader/Supplemental Instructor- Honors Elementary Formal Logic	Spring 2015
Texas A&M University- Corpus Christi	
Reader/Grader- Music Appreciation	Fall 2014
Texas A&M University- Corpus Christi	
Counselor/Music Theory Instructor- Islander Band Camp	2013—2015 (summers)
Texas A&M University- Corpus Christi	

PROFESSIONAL SERVICE

Mentor, Undergraduate Research Assistants	Fall 2019—Present
Guided four RAs on projects as members of the “Motion Capture Crew” within the Sensorimotor Neuroscience Lab, UC Merced	
Professional Development Officer	Fall 2019—Spring 2021
Cognitive and Information Sciences Graduate Student Group University of California, Merced	
Co-founder Cognitive & Information Sciences Graduate Student Group	Fall 2019
University of California, Merced	
Mentor, Women in Science and Technology	Fall 2019—Spring 2020
WSTEM University of California, Merced	
Delegate, Cognitive & Information Sciences	Fall 2019—Spring 2020
Graduate Student Association, University of California, Merced	
Co-organizer of Cognitive Science for the Common Good	October 2019
Event Theme: Improving Workplace Climate & Gender Equity in Academia Cognitive & Information Sciences, University of California, Merced	

WORKSHOP & EVENT ORGANIZATION

Professional Development Event Series (Organizer)

Fall 2019—Spring 2021

Industry(+) Job Market Panels (2)
Academic Job Market Panel
Giving Effective Presentations at Online Conferences (presenter)
Time Management Workshop (2)
Open Sciences & the Practicalities of Pre-registration
Graduate Student Experience & Navigating Support Structures
Grant Writing Workshop

Cognitive Science for the Common Good (Co-organizer)

October 2019

Event Theme: Improving Workplace Climate & Gender Equity in Academia

Cognitive & Information Sciences Brownbag (Co-host)

Spring 2019

Co-host of the CIS Graduate Student Speaker Series
Organized an Industry Jobs Panel w/ CIS Alumni
Organized an Academic Jobs Panel w/ Early Career CIS Professors

SKILLS

Transcranial Magnetic Stimulation, EEG
R, MATLAB, Python
Propositional, predicate, modal logics

LANGUAGES

English (native)
French (speak, read, & write with proficiency)

ORGANIZATIONS

Society of Music Perception and Cognition
American Psychological Association
Cognitive Neuroscience Society

INSTRUMENTS

Primary: Oboe/English Horn
Secondary: Saxophone/Clarinet/Flute

References available upon request