

Cognitive Science at Lehigh

Spring 2019

Director's Corner



Welcome to the very first issue of our Cognitive Science newsletter! We plan to issue the newsletter twice a year to share news, events, accomplishments, and other fun stuff like student and faculty profiles.

Last year was an exciting one as we celebrated 30 years of Cognitive Science at Lehigh. We started out with an anniversary party, followed by a talk series highlighting how Cognitive Science helps address important problems in the world. We wrapped up with an April visit from four alumni, three of whom were among the very first Cognitive Science majors to graduate from Lehigh (see page 2). We look forward to the next 30 years!

Stay in touch between newsletters - please join us on Facebook, Twitter, Instagram, and LinkedIn. Alums, we would love to hear what you are up to! Students' most frequent question is "What can I do with a Cognitive Science degree after graduation?" You can help us answer them!



Student Spotlight



Meet **Madison Hoff**, a senior majoring in Cognitive Science and Journalism and minoring in Data Science. This summer, Madison worked at Lehigh University Communications as an editorial services intern, where she has been writing articles and helping with the Lehigh Bulletin and Business magazines. In the future, Madison hopes to combine all her many interests and studies into one career. "I enjoy artificial intelligence and data journalism, so I think those are two potential career paths that can combine my various fields of study."

Katie Teitelbaum is a senior with an interdisciplinary BA in Cognitive Human-Centered Design-- she has constructed her individual major from elements of Cognitive Science and Graphic Design — and she has minors in Computer Science and Chinese. She particularly enjoys human-computer interaction, and has done research on memory with Professor Hupbach. Katie loves Cog Sci because it is a mix of many fields that interest her: "Cognitive science is useful for every job. Learning cognitive science can help you better understand those around you so you can understand how to improve or change people's behavior using a certain technique." She hopes to work as a user experience (UX) designer in the medical field. "I'd like to use neurofeedback to improve patients' digital experiences in hospitals and/or develop the user-interfaces for academic software for children with neurologic disabilities."



News & Events



Ben Quan, Eric MacDougall, Kim Mejia, Kathy Trinh, Madison Hoff, Alex Spiezio, Joey Rompalo

December 10, 2018: Senior project presentations. Our largest group of seniors ever!

Watch for event updates on our program webpage, <https://cogsci.cas2.lehigh.edu/>

On April 19, 2018 four of our wonderful Cognitive Science alumni came back to campus to talk to students and faculty about life after Lehigh. Hear some of their thoughts on how they chose the Cognitive Science major and what it has meant to them by visiting our Undergraduate program page

<https://cogsci.cas2.lehigh.edu/cont.../undergraduate-offerings>



Wendy Riedy '91, Joelle Dorskind '13, Chai Wu '90, Chris Biglin '90

Spring talks:

Tim Shipley, Temple University, *Understanding and Promoting Spatial Learning in the Geosciences*, January 25, 2019

Sarah Paterson, Temple University, *Brain and Cognitive Development in Infants at High Risk for Autism Spectrum Disorder*, February 21, 2019

Meet the Faculty

Meet **Professor Hector Munoz-Avila**! Professor Munoz-Avila is a professor in the Computer Science and Engineering department. He is drawn to the field of Cognitive Science based on his work in Artificial Intelligence. Professor Munoz-Avila is interested in understanding capabilities and limitations of AI by drawing parallels with people. Currently, he is interested in cognitive systems, which are motivated by peoples' capabilities; "I am interested in systems that self-assess what they do." So far, at least 5 students have done their senior thesis projects with him in this area.



Professor Munoz-Avila is originally from Colombia but he received his Ph.D. in Germany and is proficient in Spanish, German, and English. He currently serves as co-director of the Institute for [Data, Intelligent Systems, and Computation](#) at Lehigh.

Research Roundup

Just some of the many recent faculty publications!

Dannenhauer, D., Cox, M. T., and Munoz-Avila, H. (2018) Declarative metacognitive expectations for high-level cognition. *Advances in Cognitive Systems*, 6, 231-150.

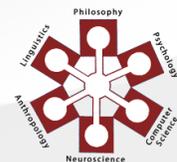
Hupbach, A., Weinberg, J., & Shiebler, V. (2018). Forget-me, forget-me not: Evidence for directed forgetting in preschoolers. *Cognitive Development*, 45, 24-30.

Ramiro, C., Srinivasan, M., Malt, B.C., & Xu, Y. (2018). Algorithms in the historical emergence of word senses. *Proceedings of the National Academy of Sciences*, 115, 2323-2328.

Marsh, J. K., De Los Reyes, A. (2018). Explaining away disorder: The influence of context on impressions of mental health symptoms. *Clinical Psychological Science*, 6, 189-202.



Cognitive Science:
The Interdisciplinary
Study of Mind



Cognitive Science Program