2020-2021

COGNITIVE SCIENCE ALUMNI SURVEY

STUDENT ASSOCIATION OF COGNITIVE SCIENCE

advice on post-graduation from Cog Sci alumni

cogsci_mcgill SACSMcGill McGill_SACS

http://cogsci-mcgill.com/

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LAND ACKNOWLEDGMENT

SACS acknowledges that McGill University is on the traditional territory of the Indigenous People, Kanien'keha:ka (Ga-niyen-ge-haa-ga). The Kanien'keha:ka are the keepers of the Eastern Door of the Haudenosaunee Confederacy. This island known as Montreal is known as Tio'tia:ke (Gio-Jaw-Gé) in the language of the Kanien'kehá:ka, and has historically served as a meeting place for other Indigenous nations.

It is not enough to just acknowledge the keepers of this land and McGill's status as a settler-colonial institution. Silence and inaction will only contribute to erasing the history, the culture, and the realities of Indigenous people. As such, it is important that individuals educate themselves on Indigenous matters and that they apply that knowledge to support Indigenous communities. SACS should actively resist (neo)-colonialism in the many forms it takes, and in the diversity of forms that resistance can take.

Considering that our readers may be scattered across the globe, we encourage you to find out whose land you are occupying at https://native-land.ca/.

INTRODUCTION

Welcome to the Cognitive Science Alumni Survey! While Cognitive Science is an extremely diverse degree, it can be challenging figuring out what to do after graduating. For this reason, SACS has compiled responses from Cog Sci alumni detailing their post-grad adventures, and advice on how to make the most of your time at McGill.

DISCLAIMER

This guide was compiled using responses to a survey posted on the Student Association of Cognitive Science's social media platforms. All of the responses are subjective. Therefore, the information in this guide should be assessed at your own risk and SACS will not hold any responsibility for missing or wrong information.

Moreover, this guide should not replace appointments with your advisor. You can find information about advising here: https://www.mcgill.ca/science/undergraduate/advice/sousa

ACKNOWLEDGMENTS

We would like to thank Héctor Léos as this guide was based on, and incorporates the information from the CogSci Advice Survey 2019-2020. We would also like to thank all of the Cognitive Science alumni for their contributions, as without their responses we would not have this guide.

AUTHORS

Cognitive Science Alumni

LAYOUT

Emma Nephtali
Akhila Rao

GENERAL INFORMATION

STREAM(S): Computer Science
MINOR: n/a
GRADUATION YEAR: May 2019

WHAT HAVE YOU DONE SINCE GRADUATING?

- Software Development
- Natural Language Processing

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

- Web Development
- Software Design Patterns
- NLP/ML Methods

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

- **COMP 330** — Theory of Computation
- **PHIL 310** — Intermediate Logic
- **COMP 550** — Natural Language Processing
- **COMP 551** — Applied Machine Learning
- **LING 445** — Computational Linguistics

ANY OTHER ADVICE?

If you're trying to get into grad school try and get into a lab in U2 at least to get enough experience. If you can afford it, staying an extra term or year to make up for a lack of research experience is worth it. Being a student has benefits!

GENERAL INFORMATION

STREAM(S): Neuroscience/Psychology
MINOR: n/a
GRADUATION YEAR: May 2016

WHAT HAVE YOU DONE SINCE GRADUATING?

VR Game Developer

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

Computer science skills mainly, along with general knowledge of some of the science behind perception.

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

Intro to Deductive Logic ended up being very helpful in a coding career, along with all the comp courses I took. Out of all the COMP courses, **COMP 206** (Intro to Software Systems) gave me practical knowledge which I've used at two different jobs now (bash scripting).

ANY OTHER ADVICE?

Every CogSci degree is unique. Whatever you end up pursuing, use your interdisciplinary background to differentiate yourself by bringing art to science or science to art.

GENERAL INFORMATION

STREAM(S): Psychology
MINOR: n/a
GRADUATION YEAR: October 2018

WHAT HAVE YOU DONE SINCE GRADUATING?

Currently pursuing a Master's degree in Psychology at Concordia University. I am carrying out my thesis in a Psycholinguistics lab.

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

The interdisciplinarity of cog sci made me the perfect candidate to get accepted into the lab in which I am currently doing research (namely the fact that I took courses in both psychology and linguistics).

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

Michael Petrides is a gem. He made **PSYC 311** one of the more memorable courses in my degree. Oran Magal was great for intro to philosophy, **PHIL 200**. **PHIL 210** logic course, super interesting conceptually, one of the more unique courses I took. It was tough and dense but worthwhile. **PSYC 211** with Jonathan Britt really solidified my confidence in my decision to switch into cog sci from physics. The course was full of super cool information. A great first year psych course. And finally, if you have the opportunity you must take Dr. Sam Veissiere's ANTH seminar. Every semester he's got a new topic. I took 2 seminars with him both fabulous.

ANY OTHER ADVICE?

You're in the best program at McGill. Take as many different courses as possible. Take advantage of the diverse array of courses available to you. Best of luck!

GENERAL INFORMATION

STREAM(S): Psychology
MINOR: Linguistics
GRADUATION YEAR: May 2020

WHAT HAVE YOU DONE SINCE GRADUATING?

Upon graduation, I will be doing my master's in cognitive science at the University of Vienna in Austria.

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

- How to think about the same subject/question from different perspectives (e.g. philosophy and neuroscience)
- How to conduct research (through COGS 401 and COGS 444)
- The master's at the University of Vienna is set up very similarly to the program at McGill, including the required course list, which means that I feel quite prepared for it. It also asks all students to write a master's thesis in the second year, which reminds me of the requirements in the research courses listed above.

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

- **PSYC 304** — Child Development with Melanie Dirks
- **PSYC 538** — Categorization, Communication & Consciousness with Stevan Harnad
- **COGS 401** — Research with Noémie Auclair-Ouellet

ANY OTHER ADVICE?

- See Ryan Bouma often, not only because he is the most amazing advisor at McGill, but also to ensure that you are on track to graduate on time.

GENERAL INFORMATION

STREAM(S): Psychology
MINOR: Linguistics
GRADUATION YEAR: May 2020

ANY OTHER ADVICE? (cont'd)

- Take at least one research course, especially if you are thinking about going to graduate school.
- Take seminars so that you have some professors that actually know you and can write you letters of recommendation (you will not get [good] ones from lectures, even if you got an A in the class because the professor most likely doesn't know you!)
- Don't wait to take your freshman and CogSci requirements (including BASC 201). Your third- and/or fourth-year self will thank you.
- Take advantage of the luxury of being able to take such a wide range of classes. Don't just take classes in your own stream.

GENERAL INFORMATION

STREAM(S): Neuroscience/Psychology
MINOR: n/a
GRADUATION YEAR: May 2019

WHAT HAVE YOU DONE SINCE GRADUATING?

Accounting assistant, soon to be student again. (Neuropsychology).

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

The interdisciplinary aspect of the faculty and the program itself allows students to master important skills in research, such as the application of the scientific approach (hypothesis, etc.) and the ability to write essays and reports with ease. It also allows a student to touch on multiple streams making it easier to access graduate programs. Touching on all streams allows for a better overall understanding of cognitive science and sciences.

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

- **NSCI 300** – Neuroethics
- **PSYC 444** – Sleep Mechanisms and Behaviour
- **PSYC 410** – Special Topics in Neuropsychology (Loved Franscesca Capozzi)
- **SOCI 310** – Sociology of Mental Disorder (Not directly in cognitive science but I believe to be relevant)

ANY OTHER ADVICE?

You got this. And if you don't, go see Ryan, he's got this. But also, don't pick a stream until you have tried at least one course in each of them.

GENERAL INFORMATION

STREAM(S): Philosophy
MINOR: Psychology
GRADUATION YEAR: May 2019

WHAT HAVE YOU DONE SINCE GRADUATING?

Research Assistant in the Douglas Centre and Functional Quality Assurance.

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

Analytical thinking and argumentation, knowledge of psychology and to look at psychological phenomena from a philosophical perspective. The most practical skill I acquire is programming.

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

- Stevan Harnad
- Samuel Veissière
- Rochard Koestner
- Kathryn Gill
- Signy Sheldon
- David Meger
- Philip Buckley
- Thomas Shultz (my favourite)
- **COMP 202** — Foundations of Programming (the most hated class among my peers, but a very interesting class and engaging class, much more than other introductory classes. A MUST take for anyone)

ANY OTHER ADVICE?

Take advantage of the versatility the program offers. I wasn't interested in Linguistics but taking just two classes to fulfill my Art credit requirements has helped me immensely in ways that I could not have foreseen.

GENERAL INFORMATION

STREAM(S): Psychology & Linguistics
MINOR: n/a
GRADUATION YEAR: May 2016

WHAT HAVE YOU DONE SINCE GRADUATING?

I am a PhD candidate in cognitive neuroscience at Carnegie Mellon University. I also have a Master's in Cognitive Science (computational neuroscience specialization) from the department of Informatics of the University of Edinburgh, and I did a Neuroimaging internship at the University of Amsterdam in the Netherlands.

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

Breadth and a good introduction to the different sub-streams of cognitive science. I did a computer science minor as well, so in terms of skills I took a lot of Maths and Comp Sci classes which gave me a good foundation. McGill's Neuroscience classes are pretty solid too.

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

- **PSYC 311** — Human Cognition and the Brain with Dr. Petrides is the best class you can take.
- **NSCI 201** — Intro to Behavioural Neuroscience 2 is very useful if you want to continue in neuroscience.
- **PHIL 221** — History and Philosophy of Science with Dr. Ian Gold gives a good overview of cognitive science from a historical perspective. I highly recommend for your first year in Cog Sci.
- **COMP 202** — Foundations of Programming is a must. You need to have some foundations in programming.

GENERAL INFORMATION

STREAM(S): Psychology & Linguistics
MINOR: n/a
GRADUATION YEAR: May 2016

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM? (cont'd)

- **COMP 424** — Artificial Intelligence is great if you want to go into computational modelling later.
- The LING classes are fun too, but not as relevant as the other ones unless you want to continue into Linguistics.
- COGS 401 & GOGS 444 are super important if you want to do research. I did both and I did not regret.

ANY OTHER ADVICE?

The program does not have enough MATH courses. If you want to deal with AI and computational modelling, you will need linear algebra, multivariate calculus and probability for sure. My best suggestion for you all is to not waste too much time taking too many high-level classes. Focus on taking the fundamental 200 and 300 level classes that will give you the foundations of what you need to know across disciplines.

Cognitive Science is not easy because there's so much to learn and everyone needs to make choices because we can't learn everything in depth, but it's extremely rewarding!

GENERAL INFORMATION

STREAM(S): Neuroscience & Psychology
MINOR: n/a
GRADUATION YEAR: May 2019

WHAT HAVE YOU DONE SINCE GRADUATING?

Graduate school (PhD in School Psychology @ Syracuse University)

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

Interdisciplinary perspectives, discussion based classes (ie Harnad's class is very similar to grad school IMO).

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

I loved special topics in neuropsychology but it was very difficult (got a B+), loved **PSYC 444** and **PSYC 412** (easy-ish A's) and for research my honours thesis was with Dr. Weinberg, which was challenging but taught me so much about writing and grad school, also worked in Dr. Eve-Marie Quintins lab which was AMAZING, truly the reason I am in grad school today

ANY OTHER ADVICE?

Get involved! Do the SACS leadership! Do research!!!!!!

GENERAL INFORMATION

STREAM(S): Neuroscience & Psychology
MINOR: East Asian Language and Literature
GRADUATION YEAR: May 2014

WHAT HAVE YOU DONE SINCE GRADUATING?

Pursuing graduate studies in public health.

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

Quantitative skills and ability to explore multidisciplinary studies during the construction of research projects.

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

Neuroscience of linguistics was interesting and all students should look into doing **COGS 401** even if they are not in the honours program. Dr. Jelena Ristic had couple of cogsci students working with her back in my days so she would be a good person to reach out to if you are interested in attention.

ANY OTHER ADVICE?

Although AI is an important and exciting area to explore, it is critical for students to recognize the valuable insights that they are being trained to apply to many different areas beyond what we are exposed as cogsci students. Think about what you can do and achieve instead of dreaming about working for Facebook or google. Focus on building practical skills like coding and quant analyses, they will help you tremendously in your future endeavours.

GENERAL INFORMATION

STREAM(S): Neuroscience
MINOR: Sociology
GRADUATION YEAR: May 2020

WHAT HAVE YOU DONE SINCE GRADUATING?

Worked as a clinic research coordinator at a lab associated with McGill

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

- Health/clinical sciences
- How to do research

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

- Anything with David Ragsdale!!
- **ANAT 321** – Circuitry of the Human Brain
- **PSYC 440** – Psychopathology
- **PSYC 310** – Intelligence

ANY OTHER ADVICE?

N/A

GENERAL INFORMATION

STREAM(S): Neuroscience
MINOR: Computer Science
GRADUATION YEAR: May 2020

WHAT HAVE YOU DONE SINCE GRADUATING?

Working as a software engineer in one of the big tech companies.

WHAT SKILLS DID YOU ACQUIRE THROUGH THE COGNITIVE SCIENCE PROGRAM THAT ARE RELEVANT TO YOUR CURRENT OCCUPATION?

- Ability to take complex topics and break them down in simple terms for other people
- Ability to learn a wide breadth of topics quickly
- Research skills / investigation and problem solving
- Fundamental logic, decision making, and ability to communicate with people from different backgrounds

WHAT AND WHO ARE SOME OF YOUR FAVOURITE CLASSES OR PROFESSORS IN THE PROGRAM?

- Ian Gold (any PHIL course), 10000%
- Giulia Alberini 10000% (**COMP 202**, **250**, **251**)
- Signy Sheldon (**PSYC 212/213**)
- Research course with your own favorite prof (**COGS 401/444**)

ANY OTHER ADVICE?

Network (take advantage of university network and connections) ; Participate in extra-curriculars (hackathons, case competitions, relevant campus clubs and positions) ; Go to career fairs ; Walk into professors' labs without booking any sort of appointment and ask about their research, be friendly, and then ask if they're looking for undergraduate researchers (worked wonders for me).