Joshua K. Carr, MASc

11 Rembrandt Drive
Embrun, Ontario, K0A 1W0
(343) 550 4687
josh.carr@carleton.ca

SKILLS

Technologies: JavaScript (ES6, NodeJS), Python 3, R, GNU/Linux, Bash, LaTeX, MS Office.

Research: Software prototyping, advanced statistics and hypothesis testing, experimental design, usability/UX analysis, qualitative interviewing, journey mapping.

Communication: Writing for refereed publications, peer-review, presenting research findings, facilitating lectures and seminars, creating data visualizations.

Other: Leadership, team-orientation, attention to detail, technology literacy, problem-solving, healthcare technologies, working with vulnerable populations.

EDUCATION

Master of Applied Science, Human-Computer Interaction September 2018-September 2020
Carleton University, Ottawa, ON

- Emphasis on brain-computer interaction and human factors in cybersecurity.
- Course requirements completed with 4.0-equivalent GPA.

Bachelor of Science (Honours), Psychology September 2011 - April 2015
Trent University, Peterborough, ON

EXPERIENCE

Research Assistant September 2018 - September 2020
Carleton University, Ottawa, ON

- Developed software prototypes, conducted user-testing as well as remote user interviews and online questionnaires.
- Design of empirical studies, statistical analysis, thematic analysis.

Teaching Assistant September 2018 - December 2019
Carleton University, Ottawa, ON

- Assisted with teaching and administration of various undergraduate courses in the Interactive Multimedia and Design program.
- Presented lectures to students, assisted students with understanding of course material, facilitated examinations, and graded student assignments.

Junior Business Analyst May - August 2019, January - April 2020
Service Canada, Gatineau, QC

- Two internships through Carleton University's Collaborative Learning of Usability Experiences (CLUE) program (2019) as well as the Federal Student Work Experience Program (FSWEP; 2020).
- Quantitative data analysis, data visualization, and communication to inform business decisions.
- Qualitative research methods, especially Journey Mapping, applied to accessibility problems in vulnerable populations.

Polysomnograph Technologist May 2017 - August 2018
Trent Regional Sleep Clinic, Peterborough, ON

- Worked with patients in a clinical setting. Setup and overnight monitoring of patients during diagnostic sleep tests. Patients included vulnerable populations such as children, elderly, disabled, and cognitively delayed individuals.
- Worked with a small interdisciplinary team in a highly collaborative environment.
- Responded to emergency medical situations, initiated treatment for sleep-disorders and hospital transfers.

- Developed familiarity with biometric sensors and healthcare technologies (e.g. electronic medical records).

Research Assistant September 2015 - April 2017
Trent University, Peterborough, ON
- Designed and executed empirical research studies in the domain of molecular neurobiology.
- Conducted statistical analyses and hypothesis testing on quantitative data.
- Communicated experimental findings via research papers, oral-visual presentations, and posters.

Teaching Assistant September 2015 - April 2017
Trent University, Peterborough, ON
- Assisted with teaching and administration of various undergraduate psychology courses.
- Presented lectures to students, facilitated small-group seminars, met with students one-on-one to assist with course material.

AWARDS AND ACHIEVEMENTS

Refereed Publications:
Carr, J.K., Fournier, N.M., & Lehmann, H. (2015). Increased task demand during spatial memory testing recruits the anterior cingulate cortex. Learning and Memory 23:9. doi: 10.1101/lm.042366.116

Kalinina, A., Maletta, T., **Carr, J.K**., Lehmann, H., & Fournier, N.M. (2019). Spatial exploration induced expression of immediate early genes Fos and Zif268 in adult-born neurons is reduced after pentylenetetrazole kindling. Brain Research Bulletin. doi: 10.1016/j.brainresbull.2019.07.003

Conference Presentations:
Carr, J.K., Kalinina, A., Lehmann, H., & Fournier, N.M. (2016). The effects of amygdala kindling on hippocampal neurogenesis and pattern separation. Program No. 461.11/LLL14. San Diego, CA: Society for Neuroscience Annual Meeting, 2016.

Kalinina, A., **Carr, J.K**, Turner, H., Lehmann, H., & Fournier, N.M. (2016). Effect of chronic seizures on the functional integration of adult born neurons. Program No. 594.26/K3. San Diego, CA: Society for Neuroscience Annual Meeting, 2016.

Carr, J.K., Fournier, N.M., Lehmann, H. (2015). Increased task demand during a spatial memory retention test recruits the anterior cingulate cortex. Program No. 83.07/X13. Chicago, IL: Society for Neuroscience Annual Meeting, 2015.

Scholarships:
NSERC Undergraduate Student Research Award (2014 and 2015)