663 RATHBURN LANE OTTAWA, ON K1T 0V9 drnadinecharanek2022@gmail.com

#### **ABOUT:**

I am a highly motivated and accomplished Cognitive Science Ph.D. candidate (expected 2026) with proven expertise in military well-being, memory, visuospatial processing, and cognitive enhancement. My work, recognized through DND-backed publications and outstanding references from senior DND officials, demonstrates both speed and precision, with rapid project turnaround and consistently high-quality outputs. Passionate about contributing to Canada's defence and security, I actively pursue professional development opportunities in the field and have been selected for the national *Women in Defence and Security (WiDS) Mentorship Program* for 2025–2026. I am seeking research opportunities within the Canadian government, particularly in defence, security, or military policy, where I can apply my skills to real-world challenges with national impact.

#### PROFILE AND SKILLS:

- Reliability Security Clearance | Canadian Citizen | Eligible for Enhanced Screening
- Multilingual: Native English and Arabic; elementary proficiency in French
- Exceptional Researcher: Endorsed by senior DND officials for producing fast, rigorous, and policy-relevant research under tight deadlines
- **Subject Matter Expertise**: Advanced knowledge in cognitive neuroscience, military well-being, visuospatial memory, psychology, linguistics, education, second-language acquisition, and human ergonomics
- **Published Author**: Peer-reviewed publications including DND-affiliated research; experienced in translating complex findings into actionable insights
- **Technical Proficiency**: Skilled in SPSS Complex Samples, R, experimental design, multivariate statistics, thematic analysis, and data visualization
- Effective Communicator: Delivered research presentations to national and international academic, military, and industry audiences
- **Operational Efficiency**: Highly organized, deadline-driven, and adept at managing multiple high-stakes projects simultaneously
- **Trusted Team Member**: Strong collaboration skills; repeatedly recognized for reliability, initiative, and independent problem-solving
- **Mission-Focused**: Committed to advancing Canada's defence, security, and policy landscape through evidence-based research

#### **EDUCATION:**

**Ph.D.** Candidate, Cognitive Science, Carleton University, Canada Specializing in working memory, serial order, vision, and bilingualism

2021-present

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Thesis: The Visuospatial Working Memory of Bilinguals, Monolinguals, and Chimpanzees: Who Has the Advantage?

Expected graduation in 2026

### M.A. Applied Linguistics and TESOL, Lancaster University, UK

Conferred 2019

Specializing in primate visuospatial memory and second language acquisition

Thesis: The Visuospatial Working of Serial Order in Humans and Chimpanzees: The Possible Influence of Language on Recall

First Class Honours

## **B.Ed. in TEFL,** Lebanese International University, Lebanon

**Conferred 2015** 

Specializing in linguistics and second language teaching and learning

**Distinction Status** 

#### **CERTIFICATES:**

- **CELTA Certificate of English Language Teaching to Adults (2016)**, Cambridge University English Examinations, Canada
- CTAS Certificate in Teaching Assistant Skills (2021), Carleton University, Ottawa, Canada
- Certificate in University Teaching (2024), Carleton University, Ottawa, Canada

#### **RESEARCH EXPERIENCE:**

#### Defence Scientist, Department of National Defence, Ottawa, Canada

2023-present

Director General Military Personnel and Research Analysis

- Led and co-authored high-impact research projects on Canadian Armed Forces (CAF) leadership, operational effectiveness, psychological safety, and member well-being.
- Analyzed and synthesized large-scale survey data (e.g., *Your Say Matters*, *Unit Morale and Climate Assessment*) using SPSS complex samples to assess CAF and DND personnel satisfaction with leadership, training, readiness, and workplace culture.
- Delivered detailed project decks and executive summaries tailored for military commanders, senior CAF Generals, and defence clients.
- Contributed to national and international research on military readiness, work-life conflict, sexual misconduct, and the Canada-led NATO Brigade in Latvia.
- Co-authored academic publications, scientific letters, and internal reports; experienced in all stages of the peer-review and policy-briefing process.
- Strong proficiency in quantitative, qualitative, and thematic analyses; highly adept at communicating complex research for operational and strategic decision-making.

Research Assistant, National Research Council, PI: Dr. Jocelyn Keillor

2023-2024

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Flight Research Lab, Department of National Defense, Canada

- Investigated the impact of whole-body vibration on pilots' in-flight tracking performance
- Developed proficiency in utilizing the OptiTrack motion capture system for precise data collection and analysis
- Applied advanced programming packages to simulate and analyze relevant data for the research
- Conducted an in-depth literature review, focusing on the influence of physiological factors on pilots' performance in various conditions
- Collaborated closely with a multidisciplinary team of experts, including former military pilots, physicists, and engineers, to ensure a holistic approach to the research endeavor

### Research Assistant, Linguistic Neurodiversity Lab, PI: Dr. Olessia Jouravlev

2021-present

Department of Cognitive Science, Carleton University, Canada

- Led research on visuospatial working memory, dyslexia, and bilingual processing costs
- Gained expertise in neuroimaging techniques (MRI, EEG, fNIRS) and behavioral methods (Audiometer, Eye-Tracking)
- Managed large and complex data sets. Performed data cleaning, integration, and quality assurance using R and SPSS
- Evaluated research questions, hypotheses, and data sources to develop insightful and relevant research outcomes for various research projects
- Presented research findings at various conferences including Psychonomics
- Collaborated on a first-author paper on bilingual processing costs (to be submitted to a journal)

# Research Assistant, Cognition and Neuroscience of Aging Lab, PI: Dr. John Anderson

2021-2022

Department of Cognitive Science, Carleton University, Canada

- Led research on cognitive reserve and the effects of aging and language on white matter integrity
- Collaborated on a project investigating the effects of bilingualism on hearing-in-noise using an audiometer and ShoeBox software
- Applied neuroscientific methods such as fractal dimensionality and MVPA to understand the brain's complexity
- Preprocessed and analyzed neuroimaging datasets using MRI software (e.g., FSL, MrTrix).
- Applied advanced multivariate statistics (e.g., partial least squares, multiple factor analysis) using R
- Collaborated on a first author paper on gray matter and white matter integrity in bilinguals (to be submitted to a journal)

### Research Assistant Perception and Learning Lab, PI: Dr. Panos Athanasopoulos

2018-2019

Department of Linguistics and English Language, Lancaster University, UK

- Designed and conducted experimental projects on various research topics, such as artificial language learning, linguistic relativity, theory of mind, language testing
- Collaborated on a second language acquisition research in partnership with Erasmus and Germany

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- Planned and led a project on visuospatial working memory of humans and chimpanzees
- Collected and analyzed qualitative and quantitative data using SPSS
- Presented and published findings at the Lancaster Postgraduate Conference in Linguistics and Language Teaching

#### **OTHER EXPERIENCE:**

Contract Instructor 2021-2025

Department of Cognitive Science, Carleton University, Canada

- Taught multiple courses including "Mysteries of the Mind" and "Introduction to Cognitive Neuroscience"
- Extensive knowledge in Learning Management Software (e.g., Brightspace)
- Experienced in teaching seminars as well as large lecture classes (400+ students)
- Designed and administered exams and assisted students with their learning and essay writing
- Used interactive course delivery using novel educational technologies and software (e.g., NearPod, WooClap)
- Conducted live experiments and fostered interactive task engagement for both large and smaller classes
- Received excellent feedback on course delivery and student engagement

Teaching Assistant 2021-present

Carleton University, Canada

- Assisted in preparing and delivering lesson plans
- Supported students with various learning needs via 1-1 learning support
- Graded assignments and provided feedback to students
- Lead the undergraduate Cognitive Science honours program review and advised the department on necessary curriculum and policy changes

Teacher 2016-2021

Nibras International School, Dubai

- Experienced in EAL and classroom teaching, with a focus on differentiated learning and supporting special needs students
- Designed curriculum for various subjects according to American curriculum standards and administered placement and standardized tests
- Prepared for and successfully passed annual provincial inspections of teaching and learning and analyzed assessments to develop individual and class action plans for progress monitoring and self-reflection

#### **VOLUNTEER EXPERIENCE:**

- Volunteer in the "Make a Connection" Program (2022-2023) at The Dementia Society of Ottawa and Renfrew County.
- Reviewer (2022) for the Cognitive Science Cyclical Review Program at Carleton University Ottawa.

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- Organizer and Committee Member (annual) for The Graduate Cognitive Science Conference at Carleton University Ottawa.
- Member of the Military Bootcamp in Navy DXB (2020) at Senses Residential and Day Care Centre for Special Needs Children in Dubai.
- Academic Student Representative (2018-2019) for the Department of Linguistics and English Language at Lancaster University, UK.
- Receiver of the "Dementia Friend" badge (2019) from Alzheimer's Society, England.
- Opening Ceremony Act, Singer, and Organizer (2015) for the Lebanese International University's Annual TEFL Charity Bake Sale.

#### AWARDS AND ACHIEVEMENTS

- PhD Student of the Year Award, Findaphd.com
- Hamlin Graduate Award, Carleton University
- P.D. McCormack Award, Carleton University
- First Class Honours (90%), Lancaster University
- Distinction Status, Lebanese International University
- 3-time award of the Dean's Honor list for academic excellence, Lebanese International University
- 3-year Scholarship for academic excellence, Lebanese International University

#### **SCIENTIFIC CONTRIBUTIONS:**

### **Published Peer-Reviewed Papers**

- Skomorovsky, A., Charanek, N., Campbell, A. H., Reeves, K., & Norris, D. (2025). Well-being among Canadian Armed Forces men and women: the roles of poor work-life balance and organizational support. *Journal of Military, Veteran and Family Health*, 11(2), 152-167. https://doi.org/10.3138/jmvfh-2024-0049
- Skomorovsky, A., Chamberland, J., & **Charanek**, **N.** (2025). Psychological health and safety in the Canadian Defence Team. *Journal of Military, Veteran and Family Health*, 11(2), 65-83. https://doi.org/10.3138/jmvfh-2024-0043

### Published Peer-Reviewed Conference Papers

• Charanek, N. (2020). Visuospatial Working Memory of Serial Order in Humans and Chimpanzees: The Possible Influence of Language on Recall. In *Papers from the Lancaster University Postgraduate Conference in Linguistics & Language Teaching* (p. 63).

### Manuscripts in Progress

- Daugherty, C., **Charanek, N.**, (n.d). Factors influencing the psychological safety of CAF members. Department of National Defence, Ottawa, Canada. (Manuscript in preparation for submission to journal).
- Baskar, A.K., Azin, T., **Charanek, N.**, & Olessia Jouravlev (n.d.). *Neuroimaging language with light: A scoping review of fNIRS studies of language processing in neurotypical adults*. Department of Cognitive Science, Carleton University, Ottawa, Canada. (Manuscript in preparation for submission to journal).
- Charanek, N., Smirnova-Godoy, I., Jouravlev, O., Madan, C., Anderson, J. A. (n.d). Language Experience Impacts Fractal Dimensionality in the Bilingual Brain: a Multivariate Approach. Department CURRICULUM VITAE Page 5 of 7

- 663 RATHBURN LANE | OTTAWA, ON K1T 0V9 | drnadinecharanek2022@gmail.com of Cognitive Science, Carleton University, Ottawa, Canada. (Manuscript in preparation for submission to journal).
- Charanek, N., Hodgins, V., Jouravlev, O. (n.d). *Bilingual processing costs in production are restricted to non-cognate, high-frequency words*. Department of Cognitive Science, Carleton University, Ottawa, Canada. (Manuscript in preparation for submission to journal).

### Conference Talks

- Skomorovsky, A. & Charanek, N. (September 18, 2025). The roles of leadership perceptions and morale in the well-being of Canadian Armed Forces men and women. NATO in the NORDICS. Oslo, Norway.
- Charanek, N., Athanasopoulos, P., Rivard, R., Jouravlev, O. (2023, July 18). *Visuospatial working memory of serial order in bilinguals, monolinguals, and chimpanzees: Who has the advantage?* Canadian Society for Brain, Behaviour & Cognitive Science, Guelph, Ontario, Canada.
- Charanek, N., Athanasopoulos, P., Jouravlev, O. (2023, April 15-16). *Visuospatial working memory of serial order in bilinguals, monolinguals, and chimpanzees: Who has the advantage?* Carleton Cognitive Science Graduate Conference, Carleton University, Ottawa, Canada.
- Charanek, N., Athanasopoulos, P., Rivard, R., Jouravlev, O. (2022, November 17-20). *Visuospatial working memory of serial order in bilinguals, monolinguals, and chimpanzees: Who has the advantage?* Psychonomics Society 63<sup>rd</sup> Annual Meeting, Boston, Massachusetts, USA.
- Charanek, N., Hodgins, V., Jouravlev, O. (2022, October 11-14). *Bilingual processing costs in production are restricted to non-cognate, high-frequency words*. The Mental Lexicon International Conference, Canada.
- Charanek, N., Athanasopoulos, P., Jouravlev, O. (2022, March 30). *Visuospatial working memory of serial order in bilinguals, monolinguals, and chimpanzees: Who has the advantage?* Carleton University, Department of Cognitive Science Colloquium Talk Series, Ottawa, Canada.
- Charanek, N., Hodgins, V., Jouravlev, O. (2021, November 26-27). *Bilingual processing costs in production are restricted to non-cognate, high-frequency words*. The Words in the World (WoW) International Conference, Canada.
- Charanek, N. (2020, October 16–18). Visuospatial Working Memory of Serial Order in Humans and Chimpanzees: A Possible Influence of Language on Recall. The Words in the World (WoW) International Conference, Canada.
- Charanek, N. (2019, June 2). Visuospatial Working Memory of Serial Order in Humans and Chimpanzees: A Possible Influence of Language on Recall. LAEL PG Conference, Lancaster, UK.

#### Conference Presentations

• Charanek, N., Smirnova-Godoy, I., Jouravlev, O., Madan, C., Anderson, J. A. (2023, April 15-16). Language Experience Impacts Fractal Dimensionality in the Bilingual Brain: a Multivariate Approach. Carleton Cognitive Science Graduate Conference, Carleton University, Ottawa, Canada.

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• Charanek, N., Athanasopoulos, P., Jouravlev, O. (2022, April 29-30). *Visuospatial working memory of serial order in bilinguals, monolinguals, and chimpanzees: Who has the advantage?* Carleton Cognitive Science Graduate Conference, Carleton University, Ottawa, Canada.

\*References (government, work, or academia) will be provided upon request.