

Pavel Yarmak

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Education

Master of Science–Biomedical Engineering

UNIVERSITY OF MANITOBA

Winnipeg, MB

Sept 2020–Present

Doctor of Medicine

UNIVERSITY OF MANITOBA

Winnipeg, MB

May 2020

Computer Programming Applications

RYERSON UNIVERSITY

Toronto, ON

Sept 2015–May 2016

Honours Bachelor of Science–Psychology and Neuroscience

UNIVERSITY OF TORONTO

Toronto, ON

Jun 2013

Clinical Electives

OPHTHALMOLOGY

Ophthalmology

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Oct 2020 (2 weeks)

Ophthalmology

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Aug 2020 (2 weeks)

Oculoplastic & Strabismus Surgery

UNIVERSITY OF TORONTO

Toronto, ON

Dec 2019 (2 weeks)

Ophthalmology & Visual Sciences

DALHOUSIE UNIVERSITY FACULTY OF MEDICINE

Halifax, NS

Nov 2019 (2 weeks)

Ophthalmology & Visual Sciences

DALHOUSIE UNIVERSITY FACULTY OF MEDICINE

Cape Breton, NS

Nov 2019 (2 weeks)

Ophthalmology

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Oct 2019 (2 weeks)

Ophthalmology Research

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Oct 2019 (2 weeks)

BREADTH

Family Medicine

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Oct 2020–Dec 2020 (6 weeks)

Anatomical Pathology

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Sept 2020 (2 weeks)

Neurology

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Mar 2020 (3 weeks)

Psychiatry

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Feb 2020 (3 weeks)

Family Medicine

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Jan 2019 (2 weeks)

Diagnostic Radiology

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Dec 2019 (2 weeks)

Early Exposures

Ophthalmology

UNIVERSITY OF MANITOBA MAX RADY COLLEGE OF MEDICINE

Winnipeg, MB

Aug 2017 (2 weeks)

Research Experience

Co-Principal Investigator

UNIVERSITY OF MANITOBA

SUPERVISOR: DRs. IAN CLARK & MICHAEL RICHARDS

- Retrospective clinical audit of treatment modalities, visual, and structural outcomes of patients diagnosed and treated for retinopathy of prematurity between 2007 and 2020.
- Generated documents for research ethics board approval.
- Involved in designing a database and data capture tools for study.

Winnipeg, MB

Aug 2020–Present

Co-Principal Investigator

UNIVERSITY OF MANITOBA

SUPERVISOR: DR. RAVI DOOKERAN

- Developing a head-mounted teleophthalmology solution capable of real-time stereoscopic video transmission from various examination instruments.
- Designed optical, mechanical, and electrical components for the prototype headset.
- Designed software to capture and securely transmit stereoscopic video of ophthalmological examination.

Winnipeg, MB

Jun 2020–Present

Co-Principal Investigator

UNIVERSITY OF MANITOBA

SUPERVISOR: DR. MATTHEW LEE-WING

- Retrospective chart review study investigating endophthalmitis rates in patients with concurrent cataracts and entropion/ectropion.
- Obtained Research Ethics Board approval and renewals.
- Wrote software to run multiple statistical analyses and generate figures using RStudio.
- Generated manuscript for publication.

Winnipeg, MB

Dec 2016–Present

Researcher

UNIVERSITY OF MANITOBA

SUPERVISOR: DR. BEHZAD MANSOURI

- fMRI study investigating novel amblyopia treatment using rTMS coupled with neurocognitive rehabilitation exercises.
- Conducted background literature review for funding application.
- Generated visual stimuli using Psykinematix and calibrated the experimental fMRI setup.

Winnipeg, MB

Mar 2017–Jun 2020

Research Assistant

ST. MICHAEL'S HOSPITAL NEUROSCIENCE RESEARCH PROGRAM

SUPERVISOR: DR. TOM SCHWEIZER

- Co-authored a paper on improving treatment outcomes for MS patients suffering from depression.
- Administered cognitive testing to patients at the memory clinic.

Toronto, ON

Dec 2012–Dec 2013

Publications

- Yarmak, P. *et al.* Cataract Surgery in Patients with Concurrent Lower Eyelid Malposition. *Canadian Journal of Ophthalmology* (Submitted for Publication)
- Hung, Y. & Yarmak, P. Neurorehabilitation for Multiple sclerosis Patients with emotional Dysfunctions. *Frontiers in neurology* **6**, 272 (2016)
- Hung, Y. *et al.* Impaired frontal-limbic white matter maturation in children at risk for major depression. *Cerebral Cortex* **27**, 4478–4491 (2017)
- Hung, Y. *et al.* Dissociations of cognitive inhibition, response inhibition, and emotional interference: Voxelwise ALE meta-analyses of fMRI studies. *Human Brain Mapping* **39**, 4065–4082 (2018)

Work Experience

Dean's Office Summer Student

RADY FACULTY OF HEALTH SCIENCES

- Performed preliminary business analysis of the implementation logistics of a new curriculum management system.
- Synthesized an initial implementation design based on input from various stakeholders.
- Created a positive working environment by ensuring a smooth onboarding process for the software developer and business analyst through generating robust documentation.

Winnipeg, MB

Jun–Aug, 2018

Grad Faculty–MCAT Instructor

KAPLAN, INC.

- Prepared and delivered high-impact lectures on various medical topics to pre-med students.
- Promoted excellence in learners by providing personalized support to students who required extra assistance after class.

Toronto, ON

Mar 2016–Aug 2016

Teaching Assistant–Neurobiology of Behaviour (HMB300H)

UNIVERSITY OF TORONTO DEPARTMENT OF HUMAN BIOLOGY

Toronto, ON

Jan–May, 2013, 2014

- Prepared well-organized lesson plans and facilitated interactive in-class tutorials.
- Consulted on administrative matters such as granting deadline extensions.
- Focused on learner welfare by supplementing in-class hours with online office hours using Google Hangouts.
- Produced guides and notes for students who were unable to attend the in-class tutorial sessions.

Summer Access Worker

SOCIETY FOR MANITOBANS WITH DISABILITIES

Winnipeg, MB

Jun 2011–Sept 2014

- Eliminated barriers to clients of lower socio-economic status by having meetings with children and their families in their own homes.
- Provided personalized care based on the wishes of parents, their children, and other care providers.
- Planned engaging, accessible, and inclusive community activities in which to partake with clients.

Leadership

COMMITTEES

Committee Member

Jan 2018–Jun 2020

RADY FACULTY OF HEALTH SCIENCES CURRICULUM MANAGEMENT SYSTEM OPERATIONS COMMITTEE

- Promoted smooth implementation by anticipating challenges such as privacy concerns and barriers to rollout.
- Identified primary stakeholders to be consulted in order to adequately address all user needs.
- Maintain attainable timeline goals by prioritizing tasks and keeping all stakeholders informed of potential limitations up-front.

Committee Member

Jan 2018–Jun 2020

RADY FACULTY OF HEALTH SCIENCES CURRICULUM MANAGEMENT SYSTEM STEERING COMMITTEE

- Identified critical gaps from the student end-user experience perspective.
- Liaison between the student body, curriculum management, and development teams.

Member

Nov 2018–Jun 2020

CANADIAN FEDERATION OF MEDICAL STUDENTS MOBILE APPLICATION WORKING GROUP

- Spearheaded the creation of a committee to explore the viability of creating a mobile companion app for the CFMS.
- Conducted market research and created high fidelity mockups for board members.
- Helped identify stakeholders and solicited bids from vendors.

Invited Special Member

Nov 2016–Jun 2020

COMMITTEE ON ONLINE LEARNING

- Facilitated informed discussion by group members through providing technical expertise.
- Conducted market research and created high fidelity mockups for board members.

Committee Member

Dec 2016–Apr 2017

CREATING SPACE VII (CCME PRE-CONFERENCE) PLANNING COMMITTEE

- Critically appraised submitted abstracts.
- Generated visually engaging materials for conference attendees.
- Created and maintained a website for conference proceedings.

Executive Member

Oct 2016–Jun 2017

STUDENT INTEREST GROUP IN NEUROLOGY (SIGN)

- Recruited new members by marketing SIGN activities to new students and strengthened existing relationships with faculty, local neurologists, residents and medical students interested in SIGN by hosting social events.
- Ensured continuity by training the incoming executive members.
- Worked as a team to encourage members' participation through delegation duties.

Member

Mar 2016–Aug 2016

CANADIAN FEDERATION OF MEDICAL STUDENTS POSITION PAPER WORKING GROUP

- Collaborated with medical students from across the country to address issues with the CFMS position paper process.
- Provided insight and steered a sub-committee exploring technical solutions.
- Integrated findings into a cohesive plan presented at a subsequent general meeting.

EXTRA-CURRICULAR ACTIVITIES

Contributor

Jun 2018–Present

ELENTRA CONSORTIUM

- Contributed quality improvements to software used by medical schools throughout Canada, the United States, and internationally to enable medical students from around the world to learn in the most user-friendly and efficient manner possible.

Chief Technology Officer

Oct 2017–Jun 2020

UNIVERSITY OF MANITOBA JOURNAL OF MEDICINE

- Created the infrastructure for medical students and other students involved in a healthcare-related professional program at the Rady Faculty of Health Sciences to be able to develop their research and critical thinking skills through participating in a peer-reviewed research process.
- Coordinated with the editorial team and the University of Manitoba libraries to generate solutions for implementation challenges—bridging the gaps between requirements such as visual presentation of materials and platform capabilities through innovative approaches.

Video Producer

Jan 2018–Apr 2019

MAX RADY COLLEGE OF MEDICINE UGME

- Collaborated on the production of a series of informational videos for medical students to address a gap identified on accreditation review.
- Cast volunteer participants. Assisted with script editing. Participated in filming and voice-over narration.

Event Facilitator

Apr 2017

CREATING SPACE VII (CCME PRE-CONFERENCE)

- Ensured smooth, timely, delivery of workshops by providing technical support to presenters.
- Enhanced conference attendee experience by providing information and assistance.

National Information Technology Officer

Oct 2016–Jan 2019

CANADIAN FEDERATION OF MEDICAL STUDENTS

- Completely overhauled the aging CFMS technology infrastructure in order to facilitate better communication with our members.
- Implemented a custom web-based financial transaction system to allow the organization to sell goods and receive fee payments.
- Implemented a new membership authentication database allowing for increased value offerings exclusively to our members securely.
- Improved management and documentation of mailing lists, emails, etc. for easier onboarding of subsequent officers.
- Spearheaded hiring of external IT professional for ongoing support to ensure continued smooth operation of CFMS technologies.

Volunteer

Oct 2016–Apr 2017

CANU REACH

- Collaborated with an interdisciplinary team of students in healthcare-related professions to deliver culturally appropriate and entertaining afterschool programming for inner-city youth.
- Aided program participants in developing self-confidence, knowledge, and skills through developing longitudinal relationships.

Creator

Dec 2016

MAX RADY COLLEGE OF MEDICINE OPAL LEARNING MANAGEMENT SYSTEM EXTENSION

- Addressed an expressed desire from the student body to have an easier, more efficient, means to video lecture playback and lecture resource-management by creating a browser-based application.

Certifications

Advanced Cardiovascular Life Support

Winnipeg, MB

HEART AND STROKE FOUNDATION

May 2020

Working Effectively with Violent and Aggressive States

Winnipeg, MB

WEAVES, INC.

Jun 2011

Languages

English Fluent

Russian Fluent

Hebrew Conversational