Wisang Sugiarta

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SUMMARY OF SKILLS AND QUALIFICATIONS

Programming| R • C++ • Java• Python • Matlab • OCaml

Languages | French|Spoken & Written • English|Spoken & Written |

EDUCATION

Master of Science – Computer Science **2022**
Quebec Artificial Intelligence Institute (MILA) and Université de Montréal
- Advisor: Emma Frejinger
- Focus/Thesis: Machine learning in operations research.
- GPA: TBD.

Bachelor of Science – Double Major in Computer Science and Physics **2021**
McGill University, Montreal, QC
- Final 60-Credit GPA: 3.78

DEC in Honours Pure and Applied Sciences **2017**
Dawson College
- Graduated Dean's list.

WORK EXPERIENCE

M.Sc Researcher **September 2021– May 2022**
Quebec Artificial Intelligence Institute (MILA)
- Use machine learning methods for operations research in path planning and transportation optimization.

Data Engineering Intern **January 2021– May 2021**
Bureau des données clinico-administratives, INESSS, Gouverment of Québec
- Use machine learning methods (deep learning) and data visualization to predict hospitalization and death rates of the subregions in Quebec.
- Help prepare presentations and reports of the SARS-COVID-19 pandemic predictions to inform the Minister of Health and Social Services whose department decides on necessary health policy.

Computational Physics Researcher **February 2020– January 2020**
Cedars Cancer Centre, McGill University Health Center, Montreal
- Implementing deep learning methods (CNNs) to create software that segments cancer cells from healthy cells and fast radiation dose calculations.
- Analysis of the radiation therapy Monte Carlo simulation software to compare RBE of patient specific cell size distributions and other quantities.

National Lifesaving Instructor and Pool Coordinator **2017 – 2020**
Kuujjuaq Pool (Coordinator, Summer 2020)
- Implementing and instructing lifesaving candidates on the procedures and regulations of the Canadian National lifesaving program.

ACADEMIC PROJECTS AND RESEARCH

Microdosimetric Analysis of the Relative Biological Effectiveness of Alpha and Beta Radiation Using 3D Tissue Specific Tumor Models *(Under review at IJRO) **2020**
Medical Physics Unit, McGill University, Montreal, QC

- Objective: The aim of this study is to determine microdosimetric quantities and make predictions of RBE using tissue models containing the same cell and nucleus size distributions as found using computer vision in a patient's histopathological sample and Monte Carlo based simulation using inhouse software.

Radioactive Decay and Counting Statistics published in the McGill Physical Journal **2019**
McGill University, Montreal, QC

- Objective: study the statistics and behavior of a decaying radioactive isotope decay using a Geiger counter to detect energetic particles emitted form the nucleus of a radioactive 137Cs sample.

PROFESSIONAL ASSOCIATIONS

Contributor **Sept 2019– present**
McGill AI Society

- Help run tutorials for lower undergraduate students looking to get into machine learning.

Contributor **Sept 2018– 2020**
The McGill Tribune (Science Section)

- Bi-Monthly contributor writing opinion articles and/or public-friendly science articles.

VOLUNTEER WORK

CEGEP Math Tutor **September 2017-present**
Dawson College

- Hold 3 hour office hour to tutor CEGEP math courses (Calculus I, II and Linear Algebra).

Assistant Coach **September 2018-September 2020**
NDG Minor Hockey, Midget A

- Help run practices and games for younger NDG teams.

INTERESTS

Experience Abroad	Spent months in Taiwan, Indonesia, USA and Western Canada
Sports	Current Junior A Hockey team, Rock Climbing
Passions	Adventure, Politics, Machine Learning and Environment