

Wisang Sugiarta

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SUMMARY OF SKILLS AND QUALIFICATIONS

Operating Systems | Windows 10 • Linux

Programming | C • Java • Python • Matlab • OCaml

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

Licenses & Certifications | National Lifeguard Instructor • Wilderness First Responder

EDUCATION

Bachelor of Science – Double Major in Computer Science and Physics

2018- 2021

McGill University, Montreal, QC

- Focus: software design, machine learning and optimization.
- Relevant Courses: Software Systems, Data Structures and Algorithm Design, Discrete Structures, Programming and Paradigms, Numerical Computing, Software Design, Software Architecture, Applied Machine Learning, Electromagnetic Waves, Statistical Mechanics, and Quantum Mechanics.
- Used to be in the Faculty of Engineering (Chemical) until switching majors.

DEC in Honours Pure and Applied Sciences

2017

Dawson College

- Dean's List every semester.
- Graduated with Honours

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 from the nucleus of a radioactive ^{137}Cs sample.

WORK EXPERIENCE

Computational Physics Researcher

February 1st, 2020– present

Cedars Cancer Centre, McGill University Health Center, Montreal

- Implementing deep learning methods to create software that segments cancer cells from health cells and fast radiation calculations
- Analysis of the radiation therapy Monte Carlo simulation software to compare RBE of patient specific cell size distributions and other quantities.

Lifesaving Instructor and Pool Coordinator**September 2017– present**

Kuujuaq Pool (Coordinator, Summer 2020), Westmount Public Pool (2017-2019) and YMYWHA Pool (Present)

- Implementing and instructing lifesaving candidates on the procedures and regulations of the Canadian National lifesaving program.
- Ensure the safety of all clients attending the facility, supervise lifeguards and other pool staff.

Bike Mechanic and Sales**May 2016– Present**

Cycle Neron (2016-2018) and MCW Bikes (Present), Montreal

- Customer service and sales.
- Repair quick and longer bike problems.
- Build bikes from manufacturers (Specialized, Cannondale, Rocky Mountain).

Outdoor Adventure Guide**May 2018– September 2018**

Camp Taiwan (Republic of China)

- Instructed rock climbing, surfing and kayaking.
- Ensured a safe and enjoyable experience to clients.
- Charged of advising/facilitating campers on a science related project each week.

PROFESSIONAL ASSOCIATIONS

Contributor**Sept 2018– present**

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