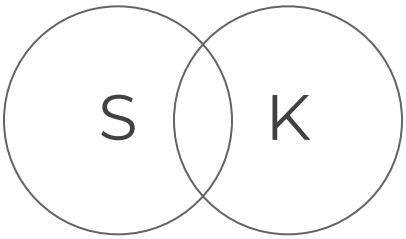

SEJIN KIM

Incoming ML Masters Student

skim2257@uwo.ca | +1 647 996 8291
github.com/skim2257
Google Scholar Profile

TECHNICAL SKILLS

Languages

- Python	*Advanced*
- R	*Intermediate*
- MATLAB	*Intermediate*
- SQL	*Intermediate*
- Javascript	*Beginner*

Machine Learning / Data Science

- PyTorch / Lightning	*Advanced*
- Tensorflow / Keras	*Intermediate*
- Scikit-learn / image	*Advanced*
- NumPy / SciPy / pandas	*Advanced*
- matplotlib / seaborn	*Advanced*

Development Frameworks

- Jupyter notebooks	*Advanced*
- Slurm workload manager	*Intermediate*
- Conda environments	*Advanced*
- Docker containers	*Beginner*

ACHIEVEMENTS

- **2x Hackathon Winner** (Hack Western, H4M)
- **National Champion** (Canadian Computing Contest)
- **Finalist** of Microsoft AI Challenge
- **Mentor** (ML/Data Science) of SheHacks IV

EDUCATION

2020 - 2022
MS - Machine Learning / Radiomics
University of Toronto

2016 - 2020
BS - Medical Health Informatics
Western University

EXPERIENCES

May 2019 - Present
Haibe-Kains Lab | Machine Learning Researcher

- Optimizing **convolutional neural nets** for 3D medical images to autonomously segment oropharyngeal cancer tumours
- Publishing **open-source package** for data processing and quality assurance for the radiomics research community
- **Co-author** of manuscript pending publication on tumour segmentation

September 2018 - Present
Western AI | Founder, Co-President

- Created on-campus organization of **400+ members**
- Liaised with faculty members / industry sponsors (Microsoft, wrnch.ai, etc) to collaborate on student-led project teams
- **Built machine learning curriculum** to teach computer science / business / medical science students ***(Python / Jupyter / Keras)***

Jun 2013 - Aug 2018
Princess Margaret Cancer Centre | Student Researcher

- Investigated potential therapy for acute myeloid leukemia
- Conducted data analysis and visualization with **R tidyverse packages**
- **Co-author** of papers/abstracts published in peer-reviewed journals; Cell Stem Cell (**IF: 21.5**), Blood (**IF: 16.6**), Cancer Research (**IF: 9.1**)

PROJECTS

AI Royale | Winner - Hack Western

- Developed an online bot dueling platform to streamline the process of developing and deploying **live AI scripts**
- Applied **serverless / FaaS technologies** to offload computing resources and instantly deploy live product

FarmStrong | Internat'l Finalist - Microsoft AI Agorize Challenge

- Developed a mobile app that classifies plant diseases by taking a picture of the affected leaf, across **14 species and 33 classes**
- Trained various CNN architectures on cloud platforms
- Combined multiple models trained on different subsets of the data to create an ensemble model achieving **98.4% precision and 90.1% recall**

PUBLICATIONS

The Mitochondrial Transacylase, Tafazzin, Regulates AML Stemness by Modulating Intracellular Levels of Phospholipids
- A Seneviratne et al. (2019) | Cell Stem Cell 24 (4). 621-636. e16.

Inhibiting the mitochondrial enzyme phosphatidylserine decarboxylase (PISD) reduces stemness and increases differentiation in acute myeloid leukemia
- M Xu, A Seneviratne et al. (2019) | Cancer Research 79 (13). 3003.

Tafazzin (TAZ) Regulates the Differentiation of AML Cells By Reducing Levels of the Phospholipid Phosphatidylethanolamine
- A Seneviratne et al. (2017) | Blood 130. 788-788.