

Keshav Worathur

Curriculum Vitae

 [kworathur.github.io](https://github.com/kworathur)

 github.com/kworathur

 keshav.worathur@mail.utoronto.ca

Education

2020 - 2024 **University of Toronto**
BSc in Computer Science (3.93/4.00)

Experience

2024 **Machine Learning Researcher, Gene2Lead**
Developed deep-learning models for predicting the reactivity of amino acids to assist in covalent drug discovery.

Awards

2024 **Best Poster Award, UTMSU Undergraduate Research Symposium**
Awarded the best poster award (valued at CAD \$1,000.00) for our work using deep learning for Brain Tumour classification.

Academic Projects

2023 **Brain Tumour Classification with Deep Learning**
Implemented a custom 3D-CNN architecture in PyTorch to assist in accurately classifying three types of Brain Tumours in the preliminary stages of diagnosis.

2022 **Generative Art Classifier**
Developed a neural network to infer which AI-generated image a respondent is referring to through survey responses.
Submitted the model to an undergraduate machine learning competition at UofT that placed in the top 10% of over fifty submissions.

Coursework and Skills

Machine Learning and Data Mining (94%), Intro to Deep Learning (92%), Intro to Artificial Intelligence (96%), Intro to Image Understanding (91%)

Programming: Python (PyTorch, NumPy, Pandas), R

Mathematics: Multivariable Calculus, Linear Algebra

Statistics: Bayesian Inference, Linear Models, Latent Variable Models

Teaching

2023 - 2024 **Undergraduate Teaching Assistant at University of Toronto**
CSC311H5: Machine Learning and Data Mining
CSC343H5: Introduction to Databases
CSC369H5: Operating Systems

Extracurricular Activities

Causation Reading Group (Summer 2023): Read and discussed the text *Intro to Causal Inference* (Neal, 2020) and presented research papers in causal inference as part of my participation in a reading group led by Professor Sonya Allin (University of Toronto)