

# KOJI WONG

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## EDUCATION

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### University of Toronto

Sept 2019 - present

*Bachelors of Science (B. Sc.)*

Computer Science Specialist

Bioinformatics and Computational Biology Specialist

Cumulative GPA: 3.88 (4.0 Scale)

## PROFESSIONAL EXPERIENCE

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### University of Toronto

Sept 2021 - present

*Infectious Disease Ecology & Evolution Research Assistant*

- Developed code to be utilized in literature-related research on host-parasite interactions and infectious disease
- Assisted in large-scale database construction of metadata from scientific literature using Python's libraries Pandas and NumPy
- Utilized machine learning library Scikit-learn to classify literature texts to determine if infections were induced experimentally or observed

## PROJECTS

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### COVID-19 CT Scan Image Classification

Oct 2021 - Jan 2022

*Python, SKlearn, Tensorflow, Matplotlib*

- Coordinated with a team of three to create a Convolutional Neural Network (CNN) using Keras and Tensorflow in Python, and trained the model on labeled datasets of lung CT scans of patients with and without COVID-19
- Analyzed model metrics such as accuracy, recall, precision and F1-score for our model using Scikit-learn
- Added callbacks to optimize model fitting such as EarlyStopping which improved metrics
- Visualized loss and accuracy plots across epochs using Matplotlib

### Memory Card Game

Sept 2021 - Dec 2021

*Java, Swing, SQL*

- Collaborated with team of six to develop a memory matching game using Java and utilized version control with git to optimize collaboration and transparent workflow
- Developed code using object-oriented design principles such as SOLID principles, design patterns, and clean architecture
- Implemented GUI using Java Swing library to create window-based application

### Algorithmic Sudoku Solver

Apr 2021

*Python*

- Implemented breadth-first and depth-first search algorithm to output the solution to a solvable Sudoku puzzle

## SKILLS

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### Languages

Python, Java, HTML, CSS, Javascript, C

### Libraries/Frameworks

Numpy, Pandas, Scikit-learn, Tensorflow, Keras, Matplotlib

### Tools

PyCharm, IntelliJ, VSCode, Github, Google Colab, Jupyter

## AWARDS & CERTIFICATES

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### LearnAI Certificate of Completion

Jan 2022

### Louis Savlov (UC'37) Scholarship in Sciences and Humanities

Nov 2021