

# Ryan Ro

## Software Developer

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## EDUCATION

**2015-2020**   **University of Toronto, HBSc, Canada**  
**Class of '19 + PEY**   *Computer Science Specialist*  
Relevant Courses : Algorithm Design & Analysis · Data Structures & Analysis · Introduction to Machine Learning · Introduction to Image Understanding · Introduction to Artificial Intelligence · The Business of Software · Engineering Large Software Systems · Programming on the Web · Introduction to Databases · The Design of Interactive Computational Media · Operating Systems

## EXPERIENCE

**September - December 2019**   **Teaching Assistant for Programming on the Web, UNIVERSITY OF TORONTO, Canada**  
    > Taught in-depth and hands-on tutorials on topics such as React and JavaScript  
    > Guided course web application projects which involved front-end, back-end, and deployment  
    > Graded/invigilated assessments for the third-year course  
    Express.js   JavaScript   MongoDB   React   Visual Studio Code

**August 2018 - August 2019**   **Full-Stack Developer, VENNGAGE, INC., Canada**  
    > Completely rewrote and optimized the second most used widget of the WYSIWIG editor  
    > Implemented automatic branding of templates based on logo and brand colours  
    > Created rule-based automatic generation of custom designs based on user inputted text experience  
    CodeIgniter   Draft.js   JavaScript   JQuery   Laravel   PHP   React   SQL   TablePlus   TypeScript   Visual Studio Code

**May - August 2016**   **Undergraduate Researcher, UNIVERSITY OF TORONTO, Canada**  
    > Designed and implemented an educational video game using the Unity game engine  
    > Conducted research on the correlation of educational retainment and video game enjoyment  
    C#   Unity

## PROJECTS

**PORTFOLIO**   JULY 2020  
ryanro97/portfolio  
A server-side rendered, lightweight, minimalist, and responsive portfolio website template.  
JavaScript   Next.js   React   styled-components   Vercel

**TRY STUDIO**   SEPTEMBER - DECEMBER 2019  
A proof of concept application for SOCAN subsidiary Dataclef, to make music licensing for small businesses simple and easy. Included customer value proposition, financial analysis, and business plan.  
Firebase   GitHub Pages   Heroku   JavaScript   Material-UI   Spotify API   Visual Studio Code

**PLAYER DETECTOR**   SEPTEMBER - DECEMBER 2019  
ryanro97/player-detector  
Frame by frame player detection with horizontal flip data augmentation using PyTorch's Faster R-CNN model with a ResNet-50-FPN Backbone.  
Google Colab   Jupyter Notebook   NumPy   OpenCV   Python   PyTorch

## SKILLS

<b>Programming Languages</b>	Bash · C · C# · HTML5/CSS3 · Java · JavaScript · PHP · Python · SQL · TypeScript · Verilog
<b>Frameworks/Libraries</b>	CodeIgniter · Express.js · Gatsby.js · Laravel · LaTeX · Material-UI · Next.js · NumPy · OpenCV · PyTorch · React · React Native · Redux · scikit-learn · styled-components
<b>Databases</b>	Firebase · MongoDB · MySQL · PostgreSQL
<b>Development Tools</b>	AWS · Docker · Docker Compose · Google Colab · Git · GitHub Pages · Heroku · Jupyter Notebook · Netlify · TablePlus · Unity · Vercel · Visual Studio Code
<b>Operating Systems</b>	MacOS · Windows 10 · Debian 10
<b>Other</b>	ArcMap · Spotify API · Stripe · Unsplash API
<b>Spoken Languages</b>	English · French · Korean