

RAYMOND(CHIH-YUNG) WU
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<https://chihwu.github.io/rayspace/> | <https://github.com/chihwu>

EDUCATION

MCMASTER UNIVERSITY GPA 3.95/4

Hamilton, ON

Master of Engineering in System and Technology

January 2021 – December 2021

BOSTON UNIVERSITY GPA 3.7/4

Boston, MA

Master of Computer Science and Computer Information System

September 2013 - May 2017

SKILLS

Languages - PHP, Java, C++, Python, TypeScript, HTML5, CSS3, JavaScript, jQuery, C

Frameworks – React.js, Vue.js, Node.js, Laravel, Drupal 8, React Native

Others – WebGL, OpenGL, Three.js, PlayCanvas, React Three Fiber, Unity 3D, ElasticSearch, Blender, OpenCV, TensorFlow, AWS, D3.js, Android, MongoDB, MySQL, REST API, Highchart.js, Arduino, Raspberry PI, Apache, Android, Adobe AfterEffects, Adobe Photoshop, Adobe Illustrator

PROFESSIONAL EXPERIENCE

THE MARKETING STORE

SENIOR SOFTWARE ENGINEER

May 2022 – Present

- Built and led 10 successful global mobile game apps for McDonald's Happy Meal global promotions
- Integrated React and PlayCanvas to build mobile 3D games with various gaming mechanics
- Ensured all mobile games are compliant with WCAG accessibility guidelines.
- Led and closely worked with various stakeholders such as creatives, project manager, developers and QA to ensure successful project launch

MCMASTER UNIVERSITY

Hamilton, ON

Application Developer

January 2022 – December 2022

- Built a remote health monitoring system for patients to communicate their health conditions with doctors
- Built the system using React.js, Node.js, Python, WebRTC, and Bitalino sensors
- Built and rigged 3D models using Blender for animations
- Built a digital twin system for a startup Axibo for its camera devices using Three.js and Blender
- Built an Unreal Engine game allowing player to switch between different views/perspectives for various levels to simulate the metaverse of a camera system

MCMASTER UNIVERSITY

Hamilton, ON

Research Assistant

September 2021 – January 2022

- Trained custom object detection and segmentation models using mainly Yolo and Mask RCNN and compared their real-time performances
- Applied trained Yolo models for applications in manufacturing industry
- Conducted research on the application of computer vision in the manufacturing industry
- Created a VR driving simulation application using Unity3D and Oculus Rift with an aim of assisting Glaucoma patients

SKY-IT SERVICES, LTD.

Hamilton, ON

React Frontend Application Developer

August 2021 – April 2022

- Using React.js to build gaming-like UI for applications
- Leading a team using ElasticSearch, React.js, and Django to build an in-house content editing application that allows company users to freely edit the content and styling of company's marketing PDF documents
- Using WebGL and Three.js to create 3D components for company's software and marketing material
- Leading a project of creating a system that automates the company's client onboarding process

ABT ASSOCIATES

Cambridge, MA

Full-Stack Application Developer

June 2017 – September 2020

- Built a community-collaboration platform featuring calendar event management, multi-media management, discussion forum, data submission, and data visualization powered by Drupal 8, Highchart.js, AWS EC2, and AWS S3.
- Collaborated with teams to maintain and upgrade legacy applications (powered by Zend 1 or Laravel 4) by constantly refac-

toring the system and adding new features.

- Built a web site based on team designer's design for client's company featuring both visually appealing page design and data visualization components powered by D3.js and content management system powered by Drupal 8.
- Utilized Vue.js modern JS framework and Highchart.js to build highly interactive and performant dashboards allowing users to quickly view dynamically filtered data from back-end.
- Utilized Drupal 8's content management system to build a wrapper on top of Tableau dashboards to allow clients to manage and view their data more easily and conveniently.
- Providing technical support and solutions for clients of different projects that require a wide variety of techniques ranging from application development, data visualization to solution architecture building and system administration.

INSEGMENT, INC.

Boston, MA

Full Stack Software Developer

February 2016 - May 2017

- Involved heavily in 4 large-scale projects and other miscellaneous web development tasks.
- Managed the process of integrating and configuring third-party applications for company's uses.
- Developed and tested scalable applications using PHPUnit with company's coding standard and agile development principle.
- Used various PHP frameworks or micro-frameworks, such as Laravel, Smarty, and Fat-Free Framework.
- Achieved designers' specific requirements about applications' UI by modifying default UI functions.
- Developed and maintained REST API to allow data communication between company's applications and database.

BOSTON UNIVERSITY - DEPARTMENT OF COMPUTER SCIENCE

Boston, MA

Research Assistant

January 2015 - January 2016

- Developed a malware analysis web application for Android mobile applications using Python and Flask Framework.
- Used androguard and weka for connecting to Google Play API, gathering sample Android mobile applications, and analyzing their security specifications.
- Developed an Android application for studying the relation between users' sociability and emotion using various Android sensor APIs and concepts of machine learning.
- Configured and managed the development environment on an Ubuntu server.

CARIBBEAN INTEGRATION COMMUNITY DEVELOPMENT, INC

Boston, MA

Full Stack Application Developer

April 2014 - December 2014

- Developed the organization's website according to the specified design from scratch.
- Built a CMS for the site using PHP, HTML, jQuery, CSS, and MySQL.

CERTIFICATES

- Tensorflow Developer Certificate
- Carnegie Mellon University Computer Vision Certificate
- UCSD Computer Graphics Certificate
- Zend Certified PHP Engineer
- Microsoft Certified Specialist in HTML5, JavaScript, and CSS3
- Microsoft Certified Professional
- Oracle Certified MySQL 5.6 Developer
- Certified AWS Cloud Practitioner
- Certified AWS Associate Developer
- Certified AWS Associate Solution Architect
- Certified AWS Associate Sysops Administrator
- Udacity Intro to Machine Learning Nanodegree
- Drupal 8 Certified Site Builder
- Drupal 8 Certified Developer
- Drupal 8 Front End Specialist
- Drupal 8 Certified Back-End Specialist
- Drupal 8 Certified Grand Master
- Certified Laravel Developer

