






# Victor Yu

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## Skills

Languages (Proficient): **C/C++, C#, Javascript (& jQuery), SQL, HTML/CSS**  
Languages (Familiar): Java, Ruby, Python  
Tools: **.NET Framework, Node.js, Rails, Flask, Microsoft SQL Server, PostgreSQL**, Git, Bash, Heroku  
Skills: Object-oriented programming, Data structures, Dynamic programming, Algorithms

## Work Experience

**Firmwater Inc. - Full Stack Web Developer** May - August 2017  
Firmwater is known for its web LMS, an online learning platform created for training companies Co-op Work Term

- Implemented a new **video player** using Video.js to give clients a consistent and enhanced experience across all media platforms, with a wrapper for SCORM data reporting
- Enabled **course sequencing** under SCORM standards, which allows course administrators to define prerequisite course content to create a more consistent learner experience
- Wrote SQL stored procedures, designed new web views, and modified backend MVC
- Technologies used: **C# (OOP), .NET Framework, Javascript, Microsoft SQL Server**

**Arrowonics - Software Intern** August 2015

Arrowonics is the only group in Canada to create aerial light drone shows


- Adapted and translated code to test viability of a **drone communication network**
- Technologies used: C#, Arduino, XBee Communication Modules

**Interware Systems - Accounting Intern** July 2015

Interware Systems offers software services for cloud computing, health services, IT management, as well as Dell Hardware Solutions

- Designed a program that **generated comparative balance sheets** for ease of financial analysis
- Technologies used: Microsoft Excel with Visual Basic

## Projects

See more on my website  
VictorHYu.github.io  
& Github 

**Audio Visualizer**  Eyehearasong.herokuapp.com  
A web app that displays customizable visuals by analyzing the properties of music files Personal Project

- Extracted data for **FFT histograms, waveforms, and volume** of music using Web Audio API
- Enabled file uploading with Express.js and File System (npm)
- Technologies used: **Node.js, Express.js, Javascript, HTML, CSS, Heroku**

**Sofa Search - Hack The North 2017**  Devpost.com/software/sofa-search  
A machine learning web app that suggests sofas to users based on feedback ratings Hackathon

- Created **machine learning model** with Keras, deep learning Python library
- Constructed backend supported by Flask, scraped sofa data from websites with BeautifulSoup
- Technologies used: **Python, Flask, Keras + Theano, Javascript, HTML, CSS, Heroku**

**SelectEngine - 1st Place at EngHack Fall 2016**  Devpost  
A utility chrome extension that allows users to quickly search highlighted text across various websites Hackathon

- Collaborated in a team to design and create a project with minimal prior experience
- Technologies used: **HTML, CSS, Javascript**

**Banana Farm** Work in progress /  Github  
A multiplayer web-based idle game with variable gameplay based on weather conditions Personal Project

- Enabled real-time gameplay using **WebSocket** and ActionCable (Rails)
- Organized user data in databases with **PostgreSQL** and ActiveRecord (Rails)
- Retrieved weather data using requests on OpenWeatherMap API
- Technologies used: **Ruby on Rails, PostgreSQL, Javascript, HTML, CSS**

## Awards & Interests

**Second Place at International DECA Conference** - Virtual Business Challenge Hotel  
**2 Perfect Scores** on nation-wide mathematics competitions for high school students

Amateur photographer, music fanatic, and avid gamer  
Interest in mathematics and investing