

# Emmett Tan

Computer Engineering

<https://emmettan.github.io/>

## TECHNICAL SKILLS

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Programming	Software/OS	Hardware and Tools Experience
<ul style="list-style-type: none"><li>• C</li><li>• C++</li><li>• Java</li><li>• Javascript</li><li>• VHDL</li></ul>	<ul style="list-style-type: none"><li>• Eclipse</li><li>• Xcode</li><li>• Quartus II</li><li>• Subversion</li><li>• Git</li></ul>	<ul style="list-style-type: none"><li>• Altera FPGAs</li><li>• Microcontrollers</li><li>• Multimeters</li><li>• Oscilloscopes</li><li>• Soldering Irons</li></ul>

## ACADEMIC & CO-OP STATUS

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<b>Academic Program</b>	<ul style="list-style-type: none"><li>• <b>University of British Columbia</b> <i>Bachelor of Applied Science - Computer Engineering Software Option</i></li><li>• 5 of 8 academic terms completed</li><li>• Anticipated date of graduation: May, 2017</li></ul>
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## WORK EXPERIENCE

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<b>Vanrx Pharmsystems Inc.</b> <b>Systems Engineering Intern</b>	<b>January 2015 - August 2015</b>
<ul style="list-style-type: none"><li>• Built a robot automation control interface to allow easy rapid prototyping</li><li>• Assisted R&amp;D with setting up and testing concepts for machines in development</li><li>• Setup vision system and calibrated cameras to detect missing vials</li></ul>	
<b>Idea Rebel</b> <b>Mobile Developer Intern</b>	<b>July 2014 – August 2014</b>
<ul style="list-style-type: none"><li>• Used Xcode to debug and test various parts of a social media app</li><li>• Ensured that user's information is properly updated by re-fetching data periodically</li><li>• Fully Implemented password reset functionality</li></ul>	

## TECHNICAL PROJECTS

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<b>Shopping Web Application</b>	<b>November 2015</b>
<ul style="list-style-type: none"><li>• Created front end user interface using HTML, CSS, Bootstrap and Javascript</li><li>• Used MongoDB to store product information and customer purchase orders</li><li>• Setup two-way data binding between user cart inventory and product stock using AngularJS</li></ul>	
<b>DJammy: Android Music Jamming App</b>	<b>November 2014</b>
<ul style="list-style-type: none"><li>• Implemented instrument class, which allows users access to four instruments and 12 keys</li><li>• Built the circuit and software for the synchronous LED lights</li><li>• Created a mini Easter Egg: LED lights blink to the beat of Sandstorm by Darude</li></ul>	
<b>Bombberman Videogame for the Nios II Embedded Processor</b>	<b>September 2014</b>
<ul style="list-style-type: none"><li>• Implemented bitmap drawer code, which reads and draws a 24 bit color 20x20 pixel bitmap</li><li>• Wrote erase and redraw functions in order to create the illusion of sprite movement</li><li>• Created random map generator which shuffles positions of powerups on the start of each new game</li></ul>	