



# Lisa Kirby

## Computer Engineering

### TECHNICAL SKILLS

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#### Computer

- Java
- HTML, CSS, JavaScript
- C/C++
- SQL
- Arduino
- Verilog, Assembly
- Git
- Shell Script – Linux

#### Electrical Equipment

- Microcontroller
- Oscilloscope
- Signal Generator
- Multimeter
- Breadboard/wiring
- Soldering Iron

#### Certifications

- Licensed BC Class 5 Driver
- CPR Level C certified

### ACADEMIC & CO-OP STATUS

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#### Academic Program

- Computer Engineering option; 3 of 8 academic terms completed
- Anticipated date of graduation: May, 2020

#### Co-op Status

- Completed 0/5 work terms; available for 4 or 8 months beginning May, 2017

### TECHNICAL PROJECTS

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#### Website – [Ljkirby.com](http://Ljkirby.com)

January, 2017 - Present

- Utilized HTML/CSS and JavaScript (jQuery and p5.js Frameworks) to implement an animated, responsive website that displays my resume, accomplishments, and blog

#### Arduino Morse Code Generator

January, 2017

- Wrote a program in Arduino that translates user input into Morse code through the usage of lookup tables
- Implemented audio and visual display interfaces - used a Piezzo buzzer and a basic led for the output of Morse code, and a seven-segment led to display concurrent English translations

#### Simple RISC Machine

November, 2016

- Collaborated with a partner to write a Verilog program that functions as a "Turing complete" computer – a system that can implement any algorithm given enough memory and time
- Successfully used program to perform basic encoded calculations on the Terasic De1-SocBoard

#### Completion/Extension of a Virtual 'Ecosystem'

November, 2016

- Wrote a program in Java (given a pre-existing, basic GUI) that displays a virtual, dynamic 'ecosystem' consisting of 'intelligent' animals, food, items, and vehicles
- Used inheritance and interfacing to maximized code reuse

#### Autonomous Claw

January, 2016 – March, 2016

- Worked within a team of 4 UBC engineering students to design, build, and program a mechanical, ground- triggered claw
- Developed an Arduino program that triggers the opening/closing the claw – utilized data read from a ground- sensor to control an Arduino driven motor

## OTHER WORK EXPERIENCE

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**Swiss Chalet Rotisserie and Grill**, North Vancouver, BC

**June, 2016 – October, 2016**

**Waitress**

- Learned the Point of Sale (POS) system, a 5-page menu, and all food options/substitutions within a week of employment – was awarded additional/busier hours 2.5 weeks ahead of the restaurant norm
- Greeted, seated, and served up to twelve tables concurrently, ensuring that customers received their orders within 20 minutes of order placement

**Meridian Farm Market**, North Vancouver, BC

**August, 2014 – April, 2015**

**Multi-Department Customer Service Representative**

- Met monthly sales quotas by continuously memorizing and advertising departmental features/promotions
- Achieved a score of 100% from two secret shoppers in all categories in a very fast-paced environment

## VOLUNTEER WORK EXPERIENCE

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**North Shore Taekwondo**, North Vancouver, BC

**November, 2011 – November, 2014**

**Junior Instructor**

- Taught youth to apply self-defense in a safe and open learning environment
- Adapted curriculum to suit each child's unique learning needs by utilizing visual, audible, and physical learning techniques in parallel
- Earned the "Most Outstanding" Award in 2014 for contribution to leadership and commitment to learning

**Catching the Spirit (CTS) Youth Society**, Vancouver, BC

**June, 2015 – August, 2015**

**Peer Leader**

- Organized CTS camps devoted to educating youth on the importance of sustainability and the environment
- Collaborated with a team of 3-5 other Peer Leaders to plan, schedule and execute all camp activities and meals
- Lead sustainability projects, including the successful construction of a community green house at the Justice Institute of British Columbia and the elimination of invasive plant species from the Burnaby Lake area

## EDUCATION

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**The University of British Columbia**

**Expected May 2020**

*Bachelor of Applied Science – Computer Engineering option*

**Handsworth Secondary School**

**September, 2010 – June, 2015**

*98% average over Grades 11 & 12*

## AWARDS

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UBC Entrance Award

**2015 (All)**

BC Graduation Program Examinations Scholarship (Top 20 in BC)

Handsworth Secondary Most Outstanding Student Award

Handsworth Secondary Top Honor Roll with Distinction

TD Canada Trust Achieve the Dream Scholarship

Jean C Lee Scholarship

Schulich Leader Nominee

Loran Scholar Nominee

## ACTIVITIES AND INTERESTS

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Embedded Systems – *Arduino, De1-SoC*

Music – *Jazz Theory, Guitar, Alto Saxophone, Piano*

Sports – *Rugby, Powerlifting, Half-Marathoning, Taekwondo*