

# Sarah Pu

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🌐 [www.github.com/sarah-pu](https://www.github.com/sarah-pu)

## SKILLS

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**LANGUAGES:** C++, C, Java, Bash, Scheme, HTML, CSS, JavaScript

**TOOLS/Frameworks:** Git, Gatsby, React, Greenfoot, BlueJ

## PROJECTS

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### PERSONAL WEBSITE

May 2020

- Created a fully interactive personal website using Gatsby, framework based on React.
- Used HTML/CSS and JavaScript to employ a responsive web design for consistent experience

### BOIDS ARTIFICIAL LIFE SIMULATION

January 2017

- Created a Greenfoot simulation in Java of the flocking behavior of birds weaving through a forest
- Implemented vector forces to ensure optimal separation, alignment, and cohesion within the flock for efficient navigation around trees

## WORK EXPERIENCE

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### PROGRAMMER

Toronto, ON

#### *KGS Research*

May 2019 – December 2019

- Created and deployed live online surveys using LimeSurvey, JavaScript, HTML/CSS
- Provided manual testing to ensure fool-proof and error-free programs; Communicated directly with clients.

### PIANO TUTOR

Winnipeg, MB

#### *Independent Tutor and Peart Music Studio*

September 2014 – June 2018

- Provided piano lessons for 10 students ranging from beginner to grade 10 of the Royal Conservatory of Music
- On average, students progressed 2 grades per year and scored 90% in their Royal Conservatory of Music Examinations; this is double the typical rate of grade progression and 17% higher than the average exam score

### ACADEMIC TUTOR

Winnipeg, MB

#### *Fort Richmond Collegiate*

September 2015 – June 2018

- 1 of 5 students who qualified to provide paid personalized tutoring services for all core courses including Math, Computer Science, Biology, Physics, Chemistry, English and French as part of the Fort Richmond Collegiate peer academic tutoring program
- Students achieved a 15% increase in exam / midterm scores on average

## EDUCATION

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### UNIVERSITY OF WATERLOO

Waterloo, ON

#### *2B Bachelor of Computer Science, Honours, Co-op Program*

Expected Graduation: June 2023

- Recipient of the President's Scholarship of Distinction for 95% GPA; awarded \$5,000
- Coursework: Object-Oriented Software Development, Data Structures/Management, Algorithm Design and Data Abstraction, Probability

## EXTRACURRICULAR ACTIVITIES AND PHILANTHROPY

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### ARCT CERTIFIED PIANIST

Winnipeg, MB

#### *Royal Conservatory of Music*

September 2009 – Present

- Awarded an aggregate of ~\$4,700 from provincial scholarships and competition awards
- Awarded \$1,500 for the 2016 Phyllis and Dorothy Holtby Scholarship (out of 2,000 applicants)

### CHARTIY PERFORMANCE PIANIST

Winnipeg, MB

#### *Canadian Diabetes Association*

September 2015 – June 2018

- Performed 5 piano pieces for ~700 attendees at the 2016 Annual Best Banting Masquerade Gala, which raised \$30,000 to support the Manitoba D-Camps program for children and youth living with type 1 diabetes