## ALEXANDER SOTNIKOV

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### **SKILLS**

Programming Languages: Java, Python, HTML, CSS, Markdown, C++, Javascript, ReactJS

Hardware: Raspberry Pi, Arduino

Soft Skills: Leadership, Initiative, Communication, Teamwork, Planning, Organization

Design/Deployment Environments: RStudio, Vercel, VSCode, Eclipse IDE, Microsoft Office Suite,

Autodesk Fusion 360, Vercel, ShinnyApps

## **PROJECTS**

Physics Club Website - Vercel, ReactJS, Javascript, NodeJS, HTML, CSS

Deployed a website on **Vercel** written in **ReactJS**, for the schools physics club.

Personal Website - RStudio, RMarkdown, HTML, CSS, ShinnyApps

Personal website built in RStudio, using RMarkdown, CSS, and HTML. Deployed using Shiny Apps.

Two Player Picaria - Raspberry Pi, Python, TCP/IP Protocol

Built a two player picaria game in **Python** with a **Graphical UI**. Using **TCP/IP Protocol**, connected two separate **Raspberry Pi's**, and had them send each other encoded information, allowing people on two separate devices to play.

### **EXTRA-CURRICULAR ACTIVITIES**

**Member** Sept 2022 - Jan 2024

VEX Robotics Team

• Effectively **communicated** and **brainstormed** solutions as part of a larger **team** on the robots design and code, later successfully implementing some of these solutions using a special programming language, VEX.

# President, Vice-President, Events-Coordinator

Sept 2021 - June 2024

Physics Club

- Devised a detailed **plan** for running stargazing events, which I implemented by **managing** a **team** of volunteers who completed tasks ranging from buying food to **advertising** and setting up the event.
- Used email **communication skills** to invite multiple guest speakers to the club who talked about topics ranging from physics, to university life.

### Founder and President

Sept 2020 - June 2024

AY. Jackson Chess Club/Community

- Took **initiative** by founding the chess club and growing it into an online community of more than 100 members, by capably applying knowledge of mail merge, and smart advertising skills.
- Created a TDSB Chess Championship winning team, by selecting a team of strong players through multiple well **organized** tryout tournaments, which I ran through my strong **leadership** of a **team** of volunteers.

## **EDUCATION**

### BASc Computer Engineering, University of Waterloo

Expected 2029

### High School Diploma, AY. Jackson SS.

2020 - 2024

- AP Coursework and Average: AP Advanced Function (98%), AP Calculus and Vectors (96%), AP Physics (95%)
- Physics Student of the Year Award (2024)
- Two consecutive distinction awards in Euclid Mathematics Contest