Alexander Sotnikov

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[LinkedIn]
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SKILLS

Programming Languages/Frameworks:	Java, Python, HTML, CSS, Markdown, C++, Javascript, ReactJS, NodeJS, EmailJS, VNC, Assembly, LATEX
Hardware:	Raspberry Pi, Arduino, STM32
Soft Skills:	Leadership, Initiative, Communication, Teamwork, Organization
Design/Deployment Environments:	RStudio, Vercel, VSCode, Eclipse IDE, Microsoft Office Suite, Tinkercad, Vercel, Github, Canva

PROJECTS

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

- Used **ReactJS**, **HTML**, and **CSS**, to create an interactive website for the schools physics club, which included important information about club activities, as well as an embeded **sign up form** which facilitated 30+ students to join the club.
- Creatively employed **EmailJS**, a **back-end** service which allowed me to create a responsive form that passed user feedback straight into the clubs email inbox.

Space Education Java App - Java, JavaFX, OOP, CSS

- Produced a **Java** application with a GUI coded using **JavaFX** and **CSS**, that taught its users about different types of galaxies in space.
- Utilized **OOP** principles to create an effectively functioning application.

TARS Prototype - Raspberry Pi, Python, VNC, Tinkercad

- Informatively built a prototype of the fictional TARS robot from the movie Interstellar using a **Raspberry Pi**, and servo motors.
- Applied my knowledge of **VNC connection** screen-sharing software, to connect the **Raspberry Pi** to a mobile device, on which I coded a **Python GUI** interface which could be used to control the prototypes motion.
- Using Tinkercad, formulated a detailed design of the project.

EXPERIENCE

Member   Sept 2022 - Jan 2024
VEX Robotics Team

- Effectively **communicated** solutions as part of a larger **team** working on the robots design and code.
- Successfully programmed crucial sections of the robots **mobility system** using the language, **VEX**.

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 then 100 members, by capably applying knowledge of **mail merge**, and smart **advertising skills**.
- Created a TDSB Chess Championship winning team, by meticulously 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%)