Nicholas Saroiu

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Objective

I am enthusiastic about learning and applying foundational concepts in programming, algorithms, and software development. With a strong passion for building and for problem-solving, I am eager to contribute my skills to real-world projects and collaborate with peers. Seeking opportunities to expand my knowledge and contribute to innovative solutions in the field of computer science.

Education

2022-2026 **Honours Bachelor of Science**, Computer Science
University of Toronto, Faculty of Arts and Science, Toronto, Canada

2018-2022 **High School Diploma**
Interlake High School, Bellevue, WA

2020-2021 **International Baccalaureate Programme Diploma**
Interlake High School, Bellevue, WA

Projects

Jul 2023 **Niniboard V1: Custom 3D-Printed Keyboard**
https://nicholassaroiu.com/pages/projects.html#niniboard-v1
Designed and built several mechanical keyboards that are still used by my friends and family. The most complex one was a custom 3D-printed keyboard with a novel one-handed design shaped specifically for my hand. Used various tools such as Fusion360 and ZMK in order to build the prototypes.

Apr 2023 ***Guess Who?* Decision Tree Bots**
https://github.com/nsaroiu/GuessWho
Built five different AI players for the game of *GuessWho* using five different decision tree algorithms (ID3, CART, C4.5, Chi-Square Automatic Interaction Detection, and Reduction in Variation). Implemented a UI using Python.

Sep 2022 **Personal Site**
https://nicholassaroiu.com/
Built a personal site to showcase some of my projects. Added mobile view to increase readability of site on mobile devices.

Nov 2021 — Aug 2022 **Niniergo Split: Custom Keyboard for My Hand**
https://github.com/nsaroiu/zmk/tree/main/app/boards/shields/niniergo_split
Designed and built a custom PCB in order to build a custom keyboard. Used a self-made ergonomic design shaped specifically for my hand. Used various tools such as Ergogen, KiCAD, and ZMK in order to build the prototypes.

Dec 2020 — Apr 2021 **Backend for Controlling an LED Strip Written in Go**
https://github.com/nsaroiu/LED_Strip_Backend
Developed a backend script using Go in order to control the color of a strip of LED lights. Script passed RGB values from HTTP requests into an Arduino connected to the LED lights.

Work/Volunteer Experience

Jul 2021 — Jun 2022
Dental Software Data Conversion Specialist
Advanced Dentistry at Century Square, Seattle, Washington
Converted dental data across two dental practice software management packages. Duties included transfer of doctor notes, tooth charts, and health histories.

Apr 2020 — May 2022
Odle Advanced Programming Club Founder
Odle Advanced Coding Club, Bellevue, Washington
Co-founded a middle school club for competitive programming. Designed a rigorous curriculum teaching advanced Java topics such as binary trees, hash tables, and graphs. Scheduled the club during the Covid-19 pandemic.

Summer 2021
Summer Program Teaching Aide
UW Robinson Center for Young Scholars, Seattle, Washington
Served as a Teaching Aide for Physics of Robotics course. Supervised high school freshmen, graded homework, and answered various physics and robotics-related questions.

Programming Skills

Python, Java, Go, Javascript, React.js, Node.js, HTML/CSS, Git, LaTeX

Personal Information

Double Citizenship: USA and Canada