

NICHOLAS SAROIU

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EDUCATION

2022-2026 **Honours Bachelor of Science**, Computer Science (*ASIP Co-op*)
University of Toronto, Faculty of Arts and Science, Toronto, Canada

PROJECTS

- MAY 2024 **Patient Portal Backend**
Developed a secure Backend REST API that supports CRUD operations on a dental patient database. API was written using the Django Restful framework in Python.
- NOV 2023 **TTC Tracker**
<https://github.com/nsaroiu/TTC-Tracker>
Developed a web application that tracks real-time Toronto TTC vehicle locations and offers arrival time predictions to users. Frontend was written using React.js, and Backend was written using Java Spring Boot. Data is pulled directly from the TTC's open feed.
- JUL 2023 **Niniboard V1: Custom 3D-Printed Keyboard**
<https://nicholassaroiu.com/pages/projects#niniboard-v1>
Designed and built 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 *Guess Who* using five decision tree algorithms (ID3, CART, C4.5, Chi-Square Automatic Interaction Detection, and Reduction in Variation). Implemented a UI using Python.
- DEC 2020 **Backend for Controlling an LED Strip**
<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

- JAN 2024 — PRESENT **TrackOne Project Developer**
University of Toronto Web Dev Club, Toronto, Ontario
Developing a comprehensive website for the University of Toronto (UofT) TrackOne Engineering program on behalf of the UofT Web Dev club. Working as part of a small team of five developers. Using React.js for the frontend and Express.js for the backend.
- 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 pandemic.

PROGRAMMING SKILLS

Python, Java, C, Go, Javascript, React.js, Spring Boot, Django, HTML/CSS, Git, LaTeX, MIPS Assembly