

# MOULIK BUDHIRAJA

[moulikbudhiraja@gmail.com](mailto:moulikbudhiraja@gmail.com) ♦ [www.moulikbudhiraja.com](http://www.moulikbudhiraja.com)

+1(519) 590-8644 ♦ Waterloo, ON ♦ Canadian Citizen

## EDUCATION

**Bachelor of Computing — Software Engineering**, University of Guelph Expected Apr 2028  
GPA: 4.0/4.0 — **Relevant Courses:** Software Design, Programming  
**Ontario Secondary School Diploma**, Bluevale Collegiate Institute Jun 2023

## EXPERIENCE

**ReSEC Lab — Wilfrid Laurier University** Aug 2023 - Present  
Website Manager & Full-Stack Developer — *PHP, JavaScript, SQL* Waterloo, ON

- Successfully transitioned a legacy web application to modern AWS-based infrastructure, leveraging Docker for enhanced scalability and maintainability.
- Optimized database architecture, gaining a substantial increase in accuracy and a 150% increase in query speed.
- Achieved a 50% reduction in API response time by refining core endpoints.

**TEDxColumbia Lake Youth** Sept 2023 - Present  
Tech · Co-head of production — *Typescript, Next.js, SQL* Kitchener, ON

- Engineered a responsive user dashboard that supports over 150 concurrent users, encompassing event organizers, speakers, and attendees.
- Implemented a robust authentication module to ensure secure user access and data protection.
- Designed and deployed an advanced user management interface for organizers, incorporating badge integration and real-time RSVP monitoring to facilitate event coordination.

## PROJECTS

**Braille Learning Device** — *Typescript, React, C++*

- Designed an innovative [braille learning system](#) that leverages ESP32, 3D-printed parts, and a user-friendly React web interface to teach the visually impaired Braille. The system's hardware and software are seamlessly integrated, providing a learning experience for the visually impaired measured to be twice as effective as current market solutions.

**Smart Irrigation Controller** — *Javascript, Node.js, C++*

- Developed an intelligent Wi-Fi connected [irrigation controller](#) to manage a sprinkler system. The system includes a web application to manage zones, schedules and monitor current tasks.

## TECHNICAL SKILLS

<b>Programming Languages</b>	Typescript, JavaScript, HTML, CSS, Python, C, C++, SQL, PHP
<b>Frameworks &amp; Libraries</b>	Node.js, Express.js, React, Next.js, Prisma, Django
<b>Developer Tools</b>	Debian, Git, Github, Docker, AWS, Google Cloud

## AWARDS

**Canada Wide Science Fair Platinum Award — Best in Innovation: Senior** 2023  
Issued by Youth Science Canada Edmonton, AB

**WWSEF Best in Division: Engineering** 2023  
Issued by Waterloo-Wellington Science & Engineering Fair Waterloo, ON

**Hack The North — Best use of Google Cloud Platform** 2023  
Issued by Major League Hacking Waterloo, ON

*References available upon request*