

Sarveshwar Senthil Kumar

SarveshwarSenthilKumar.github.io

Sarveshwar313@gmail.com | (737)-387-8338 | LinkedIn: SarveshwarSenthilKumar | GitHub: SarveshwarSenthilKumar

EDUCATION

Texas State University - Bachelor of Science in Computer Science

Concentration in Computer Engineering

San Marcos, Texas, United States

August 2026 - May 2031

Port Credit Secondary School - Ontario Secondary School Diploma

Science & Technology Regional Program, French as a Second Language Certificate

Mississauga, Ontario, Canada

Graduated June 2026

Recipient of Minister's Certificate of Recognition for Community Involvement, Ontario Merit Scholar

EXPERIENCE

ReSourced

Toronto, Ontario, Canada

Chief Technology Officer & Chief Marketing Officer

May 2022 – June 2023

- Founded an educational not-for-profit organization to help students across the country, recruited a team of more than 20+ members in Canada.
- Developed the technical codebase for the project with Flask, SQL, and HTML, CSS, JavaScript, designed to handle 1000s of web requests.
- Acquired an interview on national television (CP24) to discuss the project and call out to students
- Encouraged, supported, and acknowledged by Peel District School Board, handwritten acknowledgement from Director of Education
- Started a ReSourced club at school to support the cause, and held coding workshops (Python) for members and middle school students.

Camilla Road Sr. Public School

Mississauga, Ontario, Canada

Independent Developer

Sep 2021– May 2022

- Developed and presented 4 different passion projects/coding workshops to the school on languages such as Python, Java, and C++.
- Developed an information website for a school-wide presentation, and a variety of games played by more than 200+ students at a time.

PROJECTS

SCOPE - Engineering Idol (IEEE Best Technical Award Winner)

Toronto, Ontario, Canada

Software and Hardware Engineer

January 2026 – March 2026

- Engineered a privacy-focused sensitive monitoring system using Raspberry Pi, mmWave sensing, acoustic sensors, and VOC sensors, avoiding camera-based surveillance.
- Developed a Flask monitoring dashboard and multi-sensor scoring system to aggregate environmental and behavioral signals.
- Integrated various hardware sensors into a unified software pipeline for real-time monitoring and anomaly detection.
- Won the IEEE Technical Award at Engineering Idol for technical implementation and innovation.

Sentinel - GenAI Genesis 2026

Toronto, Ontario, Canada

Full-Stack / Machine Learning Engineer

March 2026

- Engineered a fraud detection platform combining rule-based detection, Isolation Forest anomaly detection, and graph-based transaction analysis to identify suspicious financial activity.
- Developed a React + FastAPI monitoring platform for transaction analysis, explainable fraud alerts, and visualization of suspicious transaction networks.
- Implemented graph-based analysis to identify relationships between transactions and potential money-laundering patterns.
- Integrated LLM-assisted database schema interpretation to make heterogeneous transaction datasets compatible with the detection pipeline.

VolunteerHub

Founder and Lead Developer

Toronto, Ontario, Canada

June 2025 – August 2025

- Built an AI-powered volunteer matching platform using Flask, PyTorch, SQLite, NLP, and Google Maps API to connect users with relevant opportunities.
- Implemented AI-assisted opportunity matching and geospatial search to rank opportunities based on user characteristics and location.
- Designed backend APIs and data models supporting opportunity discovery, matching, and user interactions.
- Presented the platform at Civic Tech Toronto Hacknight #505 at the University of Toronto.

ACTIVITIES AND LEADERSHIP

Zugzwang Chess Club

Founder and President

Mississauga, Ontario, Canada

November 2023 – July 2026

- Grew Chess club to more than 100 members across the world, including members from the cold-contacted 20+ universities and clubs across Canada.
- Acquired ChessNut sponsorship comprised of 4 boards worth more than \$4,000+, acquired FIDE Candidates 2024 Volunteering roles for members, declared an official Chess.com Affiliate Program

Hack Canada 2026

Logistics Executive

Waterloo, Ontario, Canada

September 2025 – March 2026

- Supported operations for a 36-hour hackathon with more than 800 registered participants, hosted at the SPUR Innovation Centre in Waterloo and featuring \$32,000 in prizes.
- Managed front-desk and participant operations, including check-in, lanyard distribution, attendee support, and on-site logistics throughout the event.
- Coordinated with fellow organizers, hackers, judges, and event staff to resolve participant issues and maintain smooth event operations during an overnight build.
- Supported an event featuring sponsor challenges from organizations including Google, Tailscale, Cloudinary, Backboard, and MLH, with teams building projects around Canadian problems.
- Returned as an organizer after participating in the inaugural Hack Canada, progressing from participant to event operations staff within one year.

Hack the Skies 2025

Finance Organizer

Toronto, Ontario, Canada

April 2025 – January 2026

- Supported financial planning and operational execution for a teen-focused hackathon designed and run by high-school students for high-school students.
- Contributed to event planning, budgeting, and coordination for an event that brought together student developers to build technology projects under a 36-hour competition format.
- Supported an organization that previously attracted 100+ applicants and produced 16 projects from students representing 30+ high schools across North America.
- Contributed to participant-facing programming and event activities, including a chess workshop, while supporting the broader event experience.
- Helped bridge financial planning with technical-event operations in a student-led organization.

SKILLS

Programming Languages: Python, C++, Java, JavaScript, TypeScript, SQL, HTML, CSS

Frontend: React, TypeScript, JavaScript, HTML/CSS, Tailwind CSS, Bootstrap, Responsive Web Design, UI/UX

Backend: Flask, FastAPI, REST APIs, PyFirmata

Machine Learning / AI: PyTorch, TensorFlow, OpenCV, NLP, Computer Vision, Isolation Forest, Graph Analysis, Image Classification, OpenAI API, Gemini API, Cohere, Roboflow

Databases: SQLite, SQL, Firebase

APIs & Services: Google Maps API, yFinance API, OpenAI API, Gemini API, Cohere API, Roboflow API

Developer Tools: Git, GitHub, Docker, Vercel, Linux, Command Line, Orkes Conductor

Hardware / Embedded: Raspberry Pi, Arduino, Sensors, Microcontrollers, PyFirmata, Electrical Circuitry

Engineering / CAD: Onshape, Orthographic Drawing, Metalworking, Woodworking, Aerodynamics

Concepts: Object-Oriented Programming, REST Architecture, Database Design, Full-Stack Development, Machine Learning, Computer Vision, NLP, Geospatial Systems, Hardware-Software Integration