

KAHAN DESAI

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TECHNICAL SKILLS:

Programming: C/C++, Python, Java, JS, HTML+CSS, C#, React-Native, Kotlin, NodeJS, ReactJS.

Tools/Tech.: Visual Studio, AWS (Cloud9, EC2, S3), Azure DevOps, JIRA, ASP.NET (Blazor, MAUI), MySQL, MongoDB, Tailwind CSS, Git, Docker, MS Office Suite, Postman, JMeter, Selenium, Flask, Pandas, Power BI, VirtualBox, WireShark.

Skills: Problem Solving, Data Structures & Algorithms, Full-Stack Development, Cloud computing, APIs, Backend services, Debugging, QA & Testing, Network Protocols, ML & Data Sci., Communication, Leadership* (*See additional exp.)

Competitive Programming: [CodeForces](https://www.codeforces.com/), [Geeksforgeeks](https://www.geeksforgeeks.org/)

EDUCATION:

Bachelor of Computer Science (Honours) (CO-OP)

Sep 2022 – Aug 2026

Major: Big Data | Conestoga College | Waterloo, Ontario

GPA: 3.74/4.00

Highlighted courses:

- A+ in Intro to Big Data (**Power BI, AWS, Apache Hadoop**), Parallel Computing (**C/C++**), Software Design (**Java**), **Team-based projects**, Probability and Statistics (**R prog.**), Object Oriented Programming (**C++**), System Analysis Design (**Azure DevOps, JIRA**), Database Management Systems (**MySQL**) (*Recommendation letters available*)
- Currently Learning: Data Science and ML, Neural Networks, Redis & Real-Time DB, Big Data Integration.

RELEVANT EXPERIENCE:

Lead Developer (Full Stack)

Dec 2024 – Present

[Seneca Hackathon](#) IT Team | Toronto, Ontario

- Directed a cross-functional team of 4 front-end & back-end developers and QA engineers, ensuring timely delivery of a full-stack website for Seneca's 2025 Food Hackathon.
- Developed the front-end using **NextJS + React, NodeJS** on server-side, with **SQL** database using **Supabase**.
- Designed and implemented software architecture as in charge of critical technology stack decisions, ensuring scalability, maintainability, and alignment with product requirements and hackathon goals.

Web Master

Apr 2024 – Present

[KW Chess Club](#) | Kitchener, Ontario

- Improved website usability and UI using various plugins in **WordPress**, reducing redundant inquiries by almost 90%.
- Developing a full-stack website with integrated membership, merchandise, and account management, as well as automated services for notifications, updates, scheduling, etc.
- Utilizing **NodeJS** for backend services, and **ReactJS** for the UI of the website; with database in **PostgreSQL**.

Software Developer

May 2023 – Aug 2024

[UinSports Inc.](#) | Waterloo, Ontario

- Developed 8 reusable **react-native** components for [Mobile app](#) covering the sports statistics and payment gateways.
- Contributed to Back-end development using **Python** micro-services, deployment on **Docker** (with **AWS Cloud**).
- Added UI enhancements that improved user satisfaction and streamlined UX, increasing user retention by 25-30%.

PROJECT WORK:

[Bits and Peas Academy](#) (*Solo-project*)

Dec 2024 – Present

- Designed, Architected, and Developed entire website using **NextJS + React** with **Tailwind CSS** for styling, implementing responsive design and dynamic content rendering for a seamless user experience.
- Building the server-side backend using the **Flask** framework (**Python**) with a **MySQL** database, and deploying on **Vercel's** serverless architecture to ensure scalability, reliability, and efficient resource management.

[Smart home innovation](#) (*Enterprise Level, IoT based*)

Sep 2024 – Dec 2024

- Developing the backend for the Home App using **.NET MAUI** for cross-platform support and **MVC** architecture, while implementing a CI/CD pipeline for automated testing and deployment in an Agile environment.
- Leveraging **Entity Framework** Core, with **SQLite**, for efficient local database management by utilizing its object-relational mapping (ORM) solution that enables **LINQ** queries for complex data manipulation.

Conestoga Connects

Feb 2024 – Apr 2024

- Developed a peer networking platform with separate client and admin portals using **C#** and **Blazor WebAssembly**, integrated with **MongoDB** for database management and **ASP.NET Core** for user authentication.
- Conducted comprehensive **testing** with over 97% code coverage using **BUnit**, **NUnit**, **MSTest**, **JMeter**, and **Selenium WebDriver** for UI, server, and performance optimization.

RoadQuest: Driving-Skills Assessment Application

Sep 2023 – Dec 2023

- Utilized **Express-NodeJS** for the back end to incorporate features like navigation functions and real-time monitoring of smartphone sensors for driving skills assessment, and managed project with **Azure DevOps**.
- Utilized **MongoDB** for database management, while implementing the Android-native mobile UI in **Kotlin** to efficiently process accelerometer and gyroscopic sensor data for precise skill evaluations.

LazyPrint: Simplified Printing

Sep 2023 – Dec 2023

- Crafted the implementation of dynamic scheduling algorithms and filter-based sorting, optimising job assignments and showcasing algorithmic proficiency, all using **Python**.
- Employed **ReactJS** for front-end, **Pandas** for data analysis in scheduling, and **Flask** for **CORS** and **REST API**.
- Provided vital support in team management, managing features pipelines, and working through internal team challenges, resulting in an 80% growth in productivity after leadership transfer.

Study-Incentivizer: Gamifying Self-Study

Oct 2023

- Guided the creation of a gamified self-study application during an 8-hour ConHacks hackathon, showcasing rapid development skills using **ReactJS** for frontend and **Python** for backend.
- Implemented face and screen-content tracking functionalities to ensure genuine study sessions, highlighting a keen focus on incorporating innovative solutions within time constraints.

Saviour In Darkness

Feb 2023 – Apr 2023

- Integrated strong foundational programming principles in **C**, including pointer arithmetic, dynamic memory allocation, data structures, recursion, Enums and file handling, along with effective unit & integration testing
- Enhanced memory management and gameplay efficiency, reducing system memory usage by 15%.

ADDITIONAL EXPERIENCE:

Leadership and Executive (Community):

- *President* Oct 2023 – Present
Kitchener-Waterloo Chess Club
 - Led multiple volunteer teams, overseeing club operations and event execution across KW region.
 - Allocated budgets and organized chess events, ensuring the financial health and growth of the club.
- *Governor* Jun 2024 – Present
South-Western Ontario Chess League
 - Participating in high-level decision-making for chess event planning and budgeting.
 - Collaborate with Ontario Chess Association members to execute strategic plans for regional chess tournaments and events, ensuring smooth operations and optimal resource allocation.
- *Teacher/Instructor* Oct 2023 – Present
Grand River Chinese School, Williamsburg Community Association
 - Teaching beginner and intermediate chess students with structured course delivery and evaluations.
- *Startup Representative* Jun 2023
Collision Conference 2023 (Olympics of Tech) | Toronto, Ontario
 - Represented UinSports at a high-profile tech conference, pitching to investors, VCs, and industry leaders while engaging with over 4000 attendees. Gained insights into AI, AWS, software trends, UI optimization, and user acquisition strategies.

Personal Achievements & Competitive Highlights:

- **Multiple time Gold Medalist in Math and Science Olympiads (2014-2019)**: Won 10 Gold and 2 Silver medals.
- **ATAL Tinkering Lab Scholar (2018)**: Recognized for innovation and creativity in STEM.
- **International Chess Player (2014 – Present)**: Ranked in the Top 500 in Canada.
- **Rubik's Cube Speed Solver (2014 – Present)**: PB – 3x3: 17.83 s | 2x2: 4.6 s (and more...)
- **Hashi Puzzle Solving (2025)**: 7x7 Hard – PB: 6.40 s (Top 300 Globally) ([link](#))