# **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, Geeksforgeeks

#### **EDUCATION:**

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

Conestoga College | Waterloo, Ontario

### Highlighted courses:

- A+ in 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, Cloud Computing with AWS.

#### **RELEVANT EXPERIENCE:**

# Lead Developer (Full Stack)

Dec 2024 – Present

Sep 2022 – Aug 2026

GPA: 3.74/4.00

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 objectrelational 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
 Kitchener-Waterloo Chess Club

Oct 2023 – Present

- 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.

## **Noteworthy Achievements:**

- 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 1000 in Canada.