

# Vatsalya Rastogi

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## SUMMARY

Detail-oriented Computer Science student with a specialization in Artificial Intelligence, possessing a robust foundation in object-oriented programming, web development, and software engineering principles. Demonstrates proficiency in JavaScript, TypeScript, Node.js, and React, with hands-on experience in developing scalable web applications. Proven track record of effective collaboration within agile teams, active participation in code reviews, and delivering high-quality solutions to real-world challenges. Recognized for outstanding attention to detail, strong problem-solving skills, and a commitment to continuous professional development.

## EXPERIENCE

### Artificial Intelligence Engineer

Glendor Inc.

September 2025 - Present, Virtual

- **Optimized federated learning frameworks** for AI in healthcare, improving training efficiency by **25%** and enabling cross-institutional collaboration while maintaining strict **HIPAA/GDPR compliance**.
- **Developed automated PHI de-identification tools** for medical images and clinical data, achieving **95%+ anonymization accuracy** and reducing manual compliance review time by **40%**.
- **Engineered scalable, privacy-preserving data sharing platforms** adopted by **10+ hospitals**, accelerating multi-institutional medical research and supporting deployment of **AI-driven diagnostic models**.

### Front-End Developer

Eztrackr Inc.

July 2025 - September 2025, Mississauga, ON

- **Audited and refactored a large-scale front-end codebase**, establishing a **scalable design system** that reduced UI inconsistencies by **30%**.
- **Built and documented a reusable React component library** with **Tailwind CSS** and **Shadcn UI**, integrated into production apps serving **1,000+ users**, standardizing UI patterns, improving **UX consistency**, cutting feature development time by **25%**, and reducing developer onboarding time by **30%**.
- **Improved user engagement by 15%** through a more cohesive, accessible, and responsive design system, directly enhancing **customer satisfaction and retention**.

### Teaching Assistant

University of Windsor

September 2025 - Present, Windsor, ON

- **Courses:** Algorithms and Programming II, Key Concepts in Computer Science.
- **Mentored and supported 100+ students** during labs and office hours, providing debugging assistance, project guidance, and conceptual reinforcement that improved **assignment completion rates and student confidence**.
- **Evaluated and graded 500+ assignments and exams** with an emphasis on **fairness, transparency, and academic integrity**, streamlining the assessment process and ensuring consistent standards across multiple cohorts.

## PROJECT

### Reactutor

[reactutor.vatsalya.wiki](https://reactutor.vatsalya.wiki)

- **Built an interactive learning platform** featuring **live in-browser coding** using **Sandpack API**, enabling students to practice and test code in real time.
- **Integrated GroqAI API** to provide **instant hints, explanations, and feedback**, improving learner engagement and reducing time-to-understanding by **~30%**.
- **Containerized the platform with Docker** and **deployed on AWS S3**, ensuring a **scalable, cloud-ready infrastructure** with high availability and low latency for **100+ users**.

### Personal Portfolio Website

[portfolio.vatsalya.wiki](https://portfolio.vatsalya.wiki)

- **Developed a fully responsive personal portfolio website** to showcase projects, skills, and achievements, optimized for **performance and cross-device accessibility**.
- **Enhanced user experience and engagement** by implementing **advanced 3D animations and interactions** using **Three.js** and **Framer Motion**, increasing average visit duration by **20%**.
- **Implemented modern development best practices** including **SEO optimization, CI/CD deployment, and analytics tracking**, resulting in improved discoverability and measurable user insights.

## SKILLS

Frontend: React, Typescript, Tailwind, Shadcn, Redux

Backend: Node.js, Express.js, Python, Docker, AWS, Firebase

Databases: MongoDB, MySQL, NoSQL

Other: Git, CI/CD, AGILE, REST APIs

EDUCATION

Bachelor of Computer Science (Honours)

Minor in Mathematics & Specialization in Artificial Intelligence • University of Windsor • Windsor, ON • 2027 • 3.7

CERTIFICATIONS

CS50's Introduction to Programming with Python

Harvard University • 2025

- Covered problem-solving, algorithms, data structures, object-oriented programming, testing, and web APIs in Python.