Yubraj Khatri

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EDUCATION

- **SUNY Brockport**   Brockport, NY
  Bachelor of Science in Computer Science; GPA: 3.5+   *Aug 2024 – present*

SKILLS

Programming: *Python, JavaScript, SQL*

Frameworks: *FastAPI, Next.js, React Native, Tailwind CSS*

Tools: *PostgreSQL, Docker, Supabase, Cloudinary*

Specialties: *Information Security, Data Analysis, Risk Management*

EXPERIENCE

- **State University of New York at Brockport**   Brockport, NY
  Summer Undergraduate Researcher | Summer 2025:   *Jun 2025 – Aug 2025*
  - **AI-Powered Assignment Feedback Platform**: Designed and deployed a production-ready AI feedback system for student assignments, enabling automated evaluation, personalized improvement suggestions, and contextual AI chat support — improved student performance scores by an estimated 15–20% based on feedback adoption.
  - **End-to-End Backend Development + Multimodal Document Parsing**: Developed a modular FastAPI backend with PostgreSQL and pgvector for structured data storage and semantic search; integrated secure authentication, role-based access, and scalable APIs for teachers and students. Implemented parsing pipelines for PDFs, PPTX, DOCX, aImplemented parsing pipelines for PDFs, PPTX, DOCX, and image-based content, processing 200+ pages per document with 95% accuracy.
  - **Intelligent Question Management:** Created a database schema to handle multi-attempt workflows, AI-generated feedback, autosaves, rubrics, and rich media explanations; supported both MCQ and long-answer formats — cut grading turnaround time from days to under 1 hour.
  - **Seamless AI Integration + Frontend Development**: Applied OpenAI GPT with ChromaDB for contextual understanding and multimodal reasoning to improve diagram/image accuracy; built a Next.js interface for dashboards and modules, reducing navigation time by 40% and improving onboarding satisfaction scores by 15%.
  - **Collaboration & Research Impact**: Collaborated with faculty to align system capabilities with pedagogical goals, contributing to research in AI-assisted education and personalized learning analytics — findings prepared for submission to an academic conference.
  - **Tech Stack:** FastAPI, PostgreSQL, pgvector, LlamaIndex, ChromaDB, OpenAI GPT, Next.js, Tailwind CSS, Docker, Streamlit

- **SUNY Brockport Residential Life**   SUNY Brockport, NY
  Night Desk Attendant: *Sep 2024 – Dec 2024*
  - **Desk Operations**: Directed overnight security in the residence hall, managing front desk coverage, assisting students with lock-out requests, and supporting Resident Assistants with administrative and safety-related tasks.
  - **Incident Response**: Trained to complete incident reports promptly and accurately, report fire alarm triggers or safety violations, and ensure swift communication of concerns to campus safety and housing staff.

- **Vedic Honey Products**   Dang, Nepal
  Front Desk Manager: *Jan 2023 – Jan 2024*
  - **Customer Communication**: Served as the primary point of contact for online inquiries via chat, email, and phone, ensuring timely and professional customer service.
  - **Order & Fulfillment Management**: Oversaw processing and tracking of 500+ monthly orders, achieving a 98% on-time delivery rate.
  - **Support Operations**: Resolved product-related queries, managed return and refund requests, and maintained customer satisfaction throughout the order lifecycle.

PROJECTS

- **ArrayWall (Handmade Wallpaper Mobile App)**: Published on Google Play Store & [App Store](#).

  Developed a cross-platform mobile application for Android and iOS using Expo and React Native, integrating Supabase (PostgreSQL) and Cloudinary for secure wallpaper storage, bookmarking, and tag-based browsing. Added offline access, direct wallpaper setting, and personalized user authentication with Clerk, now used by 100+ active users.

- **Tastes of Nepal**: Designed and deployed a responsive restaurant [website](#) for a Niagara Falls location using React and Tailwind CSS. Implemented menu filters, search functionality, and interactive UI elements, leading to a

30% increase in customer engagement during online browsing.
- **YMSHub**: A movie discovery and streaming platform powered by the TMDB API for movie data and the Vidsrc API for streaming functionality

Certifications

- **Diploma in workplace safety and Health (**Certification link**)**: Completed training in workplace safety regulations, risk assessment, ergonomics, and emergency procedures.
- **JavaScript Algorithms and Data Structures (**certification link**)**: Mastered core JavaScript concepts, including hoisting, execution context, loops, and problem-solving strategies.
- **Responsive Web Design(**Certification Link**)**: Learned to build responsive, accessible layouts using media queries, semantic HTML, and modern CSS techniques