

Ritika Shrestha

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EDUCATION

Denison University

Granville, OH

B.S in Computer Science and Mathematics, GPA: 3.79/4.00

May 2026

- *Coursework:* AI, Time Series Analysis, Stat Modeling, Real Analysis, Operating Systems, Computer Systems, Database
- *Awards:* Forbes B. Wiley Award (Math), Dean's List

EXPERIENCE

Handshake AI, Fellow

Handshake

April 2026 - Present

- Architect and execute **vibe-coding** software projects from scratch via natural language, exercising high agency over a 5-phase GitHub workflow to define tasks, engineer evaluation rubrics, and benchmark four distinct AI models

Breakthrough Tech AI, Fellow

Cornell Tech

May 2025 - May 2026

- Fellow in competitive AI Program for 2025-26 to develop technical skills in AI that includes **Machine Learning** coursework with Cornell faculty, experiential learning experiences, and mentorship from industry professionals

Junior Software Engineer

Denison IT Web Services

Nov 2022 - May 2026

- Collaborated with a team to upgrade and maintain university's official website using **Drupal**, **Vue.js**, and **Twig**, and automate development workflow using **CI/CD** in **GitLab**
- Enhanced website interface by implementing user-centric **UX designs** and developing custom modules to improve website search functionality, resulting in a **25%** increase in user engagement

Software Engineering Intern

TransCore

June 2025 - Aug 2025

- Developed AI-powered Customer Service Representatives chatbot using **Llama-3.2-vision + RAG** and **Ollama**, hosted on cloud virtual machines to automate FAQ responses and toll-processing inquiries
- Explored **prompt engineering** techniques for tone-aware responses and **fine-tuned** Qwen model to improve performance

Software Engineering Intern

Real AI Dynamics (RAID)

Dec 2024 - May 2025

- Design and implement a scalable AI-powered recommendation system for **micro SaaS** platforms
- Assist in hosting AI workshops as an educator, creating educational content, and delivering presentations

Teaching Assistant

Denison Computer Science Department

Jan 2024 - May 2024

- Assisted Computer Science students in understanding class content and completing assignments, and collaborated with professor to develop comprehensive course structures which contributed to a **30%** improvement in student grades

PERSONAL PROJECTS

[Blueberry Mart App](#)

May 2026 - Present

- Built a **full-stack** grocery commerce platform using **.NET 8**, **React Native**, and **Vite**, featuring role-based access and automated **EF Core 8** migrations with **PostgreSQL** on **Cloud SQL**
- Engineered a real-time inventory analytics pipeline using **Kafka** and **BigQuery** alongside integrations for eSewa payments, tiered memberships, and a self-service query builder for shareholders
- Deployed backend to Google **Cloud Run** and admin portal to **Firebase** Hosting via **GitHub Actions**

[Jobbie Application](#)

Dec 2024 - Dec 2025

- Designed and implemented 5 backend services using **C#** and **.NET 8** and **Node.js**, with communication facilitated through **gRPC**, **HTTP**, and **Kafka**. Containerized services using **Docker** and deployed on **Azure Kubernetes Service**
- Maintained **CI/CD** pipelines using **GitHub Actions** and **Azure DevOps** to streamline development
- Managed and optimized **MySQL** and **SQL Server** to ensure efficient data storage and retrieval

[Flavor Radar \(Nestlé\)](#)

Aug 2025 - Dec 2025

- Developed a sentiment-driven flavor prediction system using **Logistic Regression** with **TF-IDF** and **RoBERTa** to analyze **14M** Amazon reviews and extract nuanced flavor insights
- Built a **scoring system** combining popularity, growth velocity, and sentiment to rank emerging trends, enabling **Nestlé** to make data-driven R&D decisions

TECHNICAL SKILLS

- **Languages:** C++, C#, Python, SQL, Typescript, JavaScript, PHP, R, JQuery
- **Technologies:** .NET, Django, React native/js, Node.js, Drupal, Docker, GitLab, Next.js, MongoDB, AWS, TensorFlow, CI/CD, Xcode, Kubernetes, gRPC, RabbitMQ, Kafka, Azure, AKS, Arduino, GCP, LLMs, RAG

CAMPUS INVOLVEMENT

Officer, OH

Women in Math and Computer Science

Oct 2022 - May 2026

- Engaged in discussions with fellow professionals during annual **Ohio Celebration of Women** in Computing 2023