Ishaan Chamoli

IshaanChamoli.com github.com/IshaanChamoli

EDUCATION

University of Illinois Urbana-Champaign, Grainger Engineering

May 2026

- Bachelor of Science in Computer Science: James Scholar Academic Honors
- Coursework: Data Structures & Algorithms Honors, Machine Learning, Probability & Stats, Software Design

TECHNICAL SKILLS

- Python, Java, C/C++, Kotlin, SQL, HTML/CSS/JavaScript, Postman, Docker, Github, Visual Studio Code
- TensorFlow, Scikit-learn, Pandas, NumPy, Matplotlib, ReactJS, NextJS, ExpressJS, TailwindCSS, Bootstrap

WORK EXPERIENCE

Software Lead

Jan Suraaj Political Party

June 2024 - Aug 2024

- Led development of a React Native mobile app and real-time statistics dashboard for state election surveys.
- Built to drive societal change in Bihar India's lowest ranking state on the Human Development Index.
- Utilized by 5,000 volunteers to reach 6 million+ citizens, saving 300,000 US Dollars.
- Executed 5 high-profile campaigns with Harvard, Stanford alums & PM Modi's Ex-Political Strategist.

Course Assistant and PM

UIUC Computer Science

Aug 2024 - Present

- Tutoring both Kotlin and Java learners for CS 124: Introduction to Computer Science, with 2000+ students.
- Explaining topics related to maps, hashing, searching and sorting algorithms, and Android app development.
- Leading and supporting more advanced teams as a project manager for Honors students.

Representative of India

World Economic Forum

May 2022 - Aug 2023

- Selected as the sole Representative of India to serve on the Artificial Intelligence Youth Council of the forum.
- Advised 50+ companies on ethical AI development focusing on data transparency and model explainability.
- Founded and led the first-ever national chapter of the council globally, growing to 200 members.

PROJECTS

Neural Net from scratch (2024)

Machine Learning, Python

- Neural network built on ML mathematical fundamentals without the use of any existing AI frameworks.
- Implemented pipeline with dense layers, activation, ADAM optimizer, backpropagation & cross-validation.

MediChain Healthcare (2024)

Llama AI, ICP Blockchain, React

- Decentralized patient medical database for secure and efficient communication between hospitals worldwide.
- Developed an integrated context-aware AI and data platform for pandemic preparedness research.
- Awarded 1st Place in Blockchain at HackMIT MIT's Annual Hackathon with 1000+ hackers globally.

Uplift AI (2024)

OpenAI, LangChain, React Native

- Mobile app to assist users in communication with their family/friends in need of mental health support.
- Developed prompt engineered AI responses with screenshots-to-text inputs using Tesseract OCR.
- Conceptualized, developed, and pitched the app in 36 hours at HackIllinois UIUC's Premier Hackathon.

SafeR with FRIENDS (2023)

Flutter, Maps API

- Emergency network app connecting "First Responders In Emergencies 'N Dire Situations" using geolocation.
- Tested with rural governments and hospitals, India's National Adventure Foundation, and 1000 users.
- Pitched at UIUC's Cozad New Venture Challenge & awarded microgrant by the Tech Entrepreneurship Center.

SafeR Refugee Mapping (2022)

Python, Pandas

- Developed novel algorithm to analyze safe routes for refugee relocation in conflict zones based on crime data.
- Backed by Intel's AI Global Impact Award and received mentorship from MIT CS Professor Debayan Gupta.
- Deployed by the United Nations, directly impacting 550+ refugees in Kyrgyzstan & Tajikistan.