Upanshu Parekh

uparekh.dev • linkedin.com/in/uparkh • parekhupanshu@gmail.com • 630-432-1473

EDUCATION

University of Illinois at Urbana-Champaign — May 2025
Bachelor's in Computer Science — **GPA: 4.00/4.00**
- Relevant Coursework: Data Structures and Algorithms, Social Data Visualization, Computer Security
- Granted $8000 from UIUC Pathways and Engineering Advancement Scholarships

EXPERIENCE

MiRage VR Labs — Januay 2025 — Present
Software Engineer — **Champaign, IL**
- Developed a virtual reality game using Unreal Engine 5 (C++) where students can conduct VR science experiments such as metal ion flame tests and acid-base titration
- Enhanced educational engagement by providing immersive learning experiences in a virtual environment

CodeHS — June 2024 — August 2024
Full Stack Software Engineer Internship — **Chicago, IL**
- Helped 5,000,000+ students learn Computer Science by developing educational product features for students and internal staff via Django relational database, Python, Docker, JavaScript, and Memcached
- Applied OpenAI word embeddings to 1,000,000+ paragraphs to make fast internal search engine using Facebook AI Similarity Search
- Implemented real time quiz leaderboard for student quiz competitions using Google Firebase

EXTRACURRICULARS

Formula SAE — January 2024 — April 2024
Member — Data Acquisition & Quantitative Analysis
- Developed an in-house Python file format converter for MoTeC i2 telemetry software by modifying open-source tools, saving the team over $700 by replacing proprietary software
- Collaborated with team members to analyze and interpret telemetry data, contributing to performance improvements of the racecar

PROJECTS

Spotify Data Visualization with D3 — March 2024 — April 2024
Frontend Developer — **(musaic-psi.vercel.app)**
- Developed the frontend design for Musaic, a visualization tool for Spotify listeners
- Utilized D3.js for data visualization and React.js for interactivity to track and display changes in music taste over time, reflecting the user's moods throughout the year

Videogame Community Server — August 2020 — October 2023
Systems Administration Lead
- Generated $50/month in revenue by hosting Java videogame servers and a corresponding community website on Linux Virtual Machine backend using the LAMP tech stack (Linux, Apache, MySQL, PHP)
- Developed custom Java plugin in IntelliJ to manage virtual in-game currency more sensibly

SKILLS & INTERESTS

Languages: C/C++, Python, Lua, Java, JavaScript, TypeScript, HTML/CSS, SQL, LaTeX
Tools: Git/GitHub, Unix, Visual Studio Code, Slack, MacOS, Linux, AWS, Google Cloud Infrastructure, Node.js
Frameworks & Libraries: React.js, Next.js, pandas, NumPy, Matplotlib, D3.js, LESS, Tailwind
Interests: Formula 1 Racing, Weightlifting, Badminton, Meditation, Videogames, Astronomy