

# Pratyush Sudhakar

607-279-4794 | ps2245@cornell.edu | LinkedIn | GitHub | pratyushsudhakar.com | Ithaca, New York

## EDUCATION

### Cornell University

Ithaca, NY

Bachelor's of Science in Computer Science | Overall GPA: 3.865 | Major GPA: 3.97

May 2025

**Relevant Coursework:** Adv. ML Systems, Systems Prog. (C++), Algo Analysis, Func. Prog. (OCaml), OOP (Java)

## TECHNICAL SKILLS

**Programming Languages:** Python, Java, JavaScript/TypeScript, C++, OCaml

**Frontend Frameworks (Web & Mobile):** React.js, Redux.js, Next.js, Angular, Svelte, React Native, Flutter

**Backend Frameworks & Databases:** Node.js, Express.js, Flask, Django, Prisma (ORM), SQL, PostgreSQL, GraphQL

**Cloud & DevOps:** Amazon Web Services, Google Cloud Platform, Azure, GitHub Actions, Docker, Kubernetes, Nginx

## EXPERIENCE

### Software Engineering Intern

Jun 2023 - Aug 2023

*rapStudy*

*Los Angeles, California*

- Spearheaded codebase refactoring, introducing Redux for state management and memoization for component optimization, achieving a 160% improvement in the web speed index.
- Architected a secure song-sharing system, using React and 10+ custom Firestore rules for precise access control.
- Developed Redux-powered global audio-playback component, perfectly syncing with lyrics display for enhanced UX.

### Data Engineering Intern

Jun 2023 - Sep 2023

*Cornell College of Engineering*

*Ithaca, New York*

- Engineered a scalable ETL pipeline to process financial data from 3,000+ companies, utilizing Selenium (web scraping), NLP (data extraction), and multithreading, reducing processing time by 83%.
- Built a live dashboard using Next.js, Flask, and Server-Sent-Events, cutting latency by 66% with parallelization.

### Software Engineering Intern

Jun 2022 - Aug 2022

*Sellpoint*

*Remote*

- Built an inventory management app with React, Redux, and RTK Query, integrating REST API via AWS API Gateway, ECR, and DynamoDB.
- Developed real-time market analysis tool using Python data libraries, and Chart.js for trends visualization.

## ACTIVITIES

### Head of Engineering & President

Jan 2023 - May 2024

*Cornell Perfect Match: Dating Service for Cornellians*

*Ithaca, New York*

- Led 4 cross-functional teams through product launch, managing recruitment and onboarding.
- Enhanced UI/UX and set up automated personalized emails (cron jobs), resulting in 600+ new active users.
- Transitioned to online matching algorithm, deployed via Flask microservice, achieving 50,000+ real-time matches.
- Engineered data analytics system using Map-Reduce framework and server-side caching, delivering live instant insights to 5,000+ users.

### Technical Product Manager

Jan 2023 - Dec 2023

*Cornell Digital Tech & Innovation*

*Ithaca, New York*

- Spearheaded agile development of cross-platform ride scheduling app with 7-developers team.
- Architected test-driven development pipeline using Cypress, Mocha, and Supertest, attaining 94% code coverage.
- Orchestrated CI/CD workflow with GitHub Actions and Kubernetes for streamlined deployment and testing.

## PERSONAL PROJECTS

**Harmonious Sounds** | *Scikit-Learn, React, Flask, Express, Docker, Nginx*

*Feb 2023 - Apr 2023*

Web application incorporating a Logistic Regression model to predict users' Spotify playlists' happiness levels with 88% accuracy. Leveraged Nginx for seamless load balancing and proxying between 4 microservices.

**AI Syllabus Summarizer & Q&A Tool** | *Supabase, Zilliz, Next.js, Flask, LangChain*

*Feb 2024 - Apr 2024*

Course syllabus query system with REST API backend, integrating Langchain for NLP and Zilliz cluster for vector similarity search, enabling efficient retrieval and context-aware responses to student queries.

**Live Blog and Video Sharing Platform** | *Next.js 14, Apollo, GraphQL, MongoDB, Mux*

*Apr 2024 - May 2024*

Full-stack web app with a Netflix-style interface, enabling users to create and share engaging blogs and live videos.