Pratyush Sudhakar

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EDUCATION

Cornell University

Ithaca, NY

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

May 2025

Relevant Coursework: Advanced Machine Learning Systems, Systems Programming (C++), Analysis of Algorithms, Functional Programming (OCaml), Object-Oriented Programming (Java), Intro to Machine Learning, Computer Vision

Activities: Cornell Wushu (Vice-President), Object-Oriented Programming (TA), Association of CS Undergrads (Member)

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: Node.js, Express.js, Flask, Django, Nest.js, FastAPI, Prisma (ORM)

Databases & Query Languages: SQL, GraphQL, MySQL, PostgreSQL, MongoDB, DynamoDB, Firebase

Cloud & DevOps: Amazon Web Services, Google Cloud Platform, Microsoft 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 website's 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 with Selenium (web scraping), NLP (data extraction), and multithreading, reducing processing time by 83% for financial data from 3.000+ companies.
- Built a live dashboard using Next is, Flask, and Server-Sent-Events, cutting latency by 66% through parallel processing.

Software Engineering Intern

Jun 2022 - Aug 2022

Sellpoint

Remot

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

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.
- Developed real-time user analytics system using MongoDB Map-Reduce and server caching, providing actionable insights for 5,000+ users with minimal latency.

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, Chai, and Supertest, attaining 94% code coverage.
- Orchestrated CI/CD workflow with Docker containers, Kubernetes, and GitHub Actions for streamlined deployment.

Personal Projects

CleverHug Email Scheduler | React, Flask, QStash, Tailwind

Apr 2024 - May 2024

Full-stack web application empowering users to schedule personalized, uplifting emails to their future selves, leveraging LangChain models for optimized scheduling rules (RRULE) and QStash for robust queue management and reliable delivery.

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

Feb 2024 - Apr 2024

Web app enabling students to query syllabus content using natural language. Developed REST APIs and used Supabase for data storage and a Zilliz cluster for fast vector search of cached responses, ensuring low latency and optimized performance.

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 blog posts and live video content.

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

Feb 2023 - Apr 2023

Microservices-based 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.