# Vyom Yadav

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#### **Objective**

Looking for a full-time Software Engineer position where I can leverage 3 years of full stack development experience building scalable web applications and my academic training in Computer Engineering at NYU to contribute to innovative, high-impact software solutions.

New York University - New York, NY

Master of Science: Computer Engineering | Expected May 2025 | GPA: 3.7/4.0

Manipal University Jaipur - Jaipur, India

Bachelor of Technology in Information Technology | Apr 2020 | GPA: 8.59/10

#### **Relevant Coursework**

Data Structures and Algorithms, Software Engineering I, Real Time Embedded Systems, Computer Systems Architecture, Machine Learning, Deep Learning, Applied Matrix Theory, Digital Signal Processing, VLSI, Operating Systems, DBMS.

#### **Skills**

- Programming Languages: Java, Python, JavaScript, TypeScript, PHP
- Databases: MySQL, PostgreSQL, MongoDB, GraphQL
- ReactJS, NextJS, EmberJS, BackboneJS, Spring Boot, Django
- AWS (EC2, S3, RDS, ELB), Azure, Google Cloud Platform
- HTML, CSS, NodeJS, SOAP, Swagger, Restfull APIs

- · Testing & QA: Selenium, JUnit, Cypress
- CNN, TensorFlow, PyTorch, Keras, Scikit-learn
- DevOps & Tools: Docker, Kubernetes, Jenkins, GitLab CI
- Integrations & Utilities: RabbitMQ, Ngrok, Radix

### **Experience**

#### Tiny Archives - New York, NY

#### Computer Science Engineer Intern | Sept 2024 - Dec 2024

- Enhanced application performance and UX by designing optimized, mobile-responsive UI components; contributed to a 25% improvement in page load time and accessibility compliance across devices.
- Developed and deployed a robust backend using Node is and AWS (EC2, Lambda, S3), reducing application downtime by ~40% during peak usage.
- Integrated secure payment processing with Stripe for web and mobile platforms, supporting 1000+ active transactions/month with 0 reported security issues
- Contributed to real-time data ingestion and processing workflows for the AI Copilot, improving AI responsiveness and aiding product launch readiness.

## Talview (AIWF Technologies Private Limited) - Bengaluru, India

#### Full Stack Developer | Apr 2020 – Jun 2023

- Engineered responsive and engaging UIs using React and Next.js, leading to a ~20% reduction in bounce rates and increased user engagement across platforms.
- Led full-stack development of a scalable event management platform (10,000+ concurrent users) with a Node.js backend, real-time updates, and biometric authentication (facial/audio recognition), significantly reducing fraudulent access.
- Modernized backend systems by migrating REST APIs to GraphQL and integrating Zipkin for distributed tracing, resulting in ~35% faster frontend data loads and 50% quicker incident diagnosis.
- Strengthened development workflows by building Cypress test suites and implementing CI/CD pipelines via GitLab CI, reducing deployment failures and accelerating release cycles.

#### Prosix Infotech Pvt Ltd - Lucknow, India

#### Summer Computer Science Intern | May 2019 to July 2019

- Led migration of a legacy PHP codebase from v2.0 to v3.0, improving code maintainability and reducing runtime errors by 60%.
- Implemented new backend logic modules that resulted in 15% faster load times and improved developer onboarding through updated documentation.

#### **Projects**

#### Candidate Screening Platform - NodeJS, Solr, NextJS, OpenAI, MySQL

- Developed AI recruitment platform using OpenAI and Solr, reaching ~90% match accuracy and reducing screening time by 70%.
- Integrated MySQL for structured data storage and built a dynamic, recruiter-friendly UI using Next.js, ensuring smooth and efficient user interactions.

#### Expense Tracker Web Application - Python, Django, ReactJS, MySQL

- Built full-stack budgeting tool with real-time tracking, visual analytics, and alerts to help users manage spending.
- Implemented secure multi-user authentication and persistent storage, achieving 99.9% uptime in deployment testing.

#### AI-Driven Chatbot and Dynamic Form Generator - MySQL, ReactJS, NodeJS

- Built OpenAI-powered chatbot to generate personalized CVs and dynamic forms with adaptive, user-driven logic.
- Boosted form completion rates by ~40% by implementing real-time suggestions and storing adaptive workflows in a MySQL backend.

#### Inventory Management System - PostgreSQL, React, NodeJS, HTML, CSS

- Built a cloud-based inventory platform for small retailers to manage and broadcast real-time stock, with integrated product search and low-stock alerts.
- Reduced tracking errors by 50% and improved customer access to live inventory through automated updates and intelligent alerting features.

#### Waste Detection using Image Training - Python, TensorFlow, OpenCV, ResNet50

- Built smart waste detection with CCTV footage, leveraging ResNet and OpenCV to classify waste at 92% accuracy on 5,000+ images.
- Optimized for low-resolution environments, making it suitable for smart city applications and real-time urban waste monitoring.

#### Parkinson's Tremor Detection System - C/C++, Embedded C, STM32, Gyroscope, LCD, Python

- Designed tremor detection on STM32 to detect 3-6 Hz tremors linked to Parkinson's, with real-time frequency and intensity display.
- Enabled post-capture analysis by pairing the system with Python-based tools for data plotting and trend visualization.

#### Research: A Regularized Volumetric ConvNet for Alzheimer's Detection -

- Published in Cogent Engineering (2024) | Read here
- Developed a deep learning model using MRI data (MIRIAD) achieving 97% classification accuracy.

#### Research: Paper on Use of Programming Languages in the real world -

Presented at SPEEDS-2018 Seminar, Lucknow – Discussed factors influencing programming language selection across industries.