Nihal Dewangan

Durg (C.G.), India

☎ +91 7024628039 | ✉ nihaldeew1998@gmail.com | in nihal-dewangan-77a8aa16a

Profile

Detail-oriented and highly motivated Backend Developer with a strong foundation and extensive experience in web development, seeking opportunities to leverage skills in creating robust and scalable solutions. Proven track record of successful project management, team leadership, and optimization of web applications to enhance performance and user experience.

Education

National Institute of Technology   *Raipur (C.G.), India*
B.Tech. (Honors) in Biotechnology   *Aug 2017 - May 2021*
- Graduated with 8.27 CPI

DAV Public School, Hudco   *Bhilai (C.G.), India*
CBSE Class 12   *Apr 2016 - May 2017*
- Passed with 84.8 %
- Specialised in Physics, Chemistry, and Maths with Computer Science

Work Experience

Onorall Technologies Pvt. Ltd.   *Remote*
Backend (Django) Developer   *Jul 2022 - Feb 2024*
- Restructured development and production environments by creating a dedicated development server for testing purposes, preventing untested code from being reflected in the production environment.
- Spearheaded initiatives to significantly reduce operating costs for cretskill.com, an edtech up-skilling platform, by over 60 % through strategic optimization of cloud resources and efficient database management techniques.
- Demonstrated expertise in backend development using Django, Next.js, and REST architecture to ensure high performance and scalability of web applications.
- Employed advanced video processing functionalities, including HLS streaming for adaptive bitrate delivery and integration of DRM solutions to safeguard content against piracy.
- Led the implementation of authentication mechanisms, such as JWT and Google authentication, ensuring secure access to platform resources and user data. Utilized Google authorization code grant flow to authenticate users and enhance security.
- Orchestrated the integration of notification systems using WebSockets (Django Channels) and task scheduling with Celery to optimize server performance and enhance user engagement.
- Leveraged Django ORM and advanced database optimization techniques to enhance query performance and scalability, including the implementation of Postgres Full-Text Search (FTS) functionality with weights for improved search capabilities.
- Configured and optimized CDN and ticketing systems (UVdesk and tawk.to) to enhance user experience and streamline support processes.
- Implemented custom middleware to enforce security measures, checking for a specific custom header in incoming requests. If the header was not present, access to the development environment was denied, mitigating potential risks associated with external access.
- Orchestrated the video processing task to be performed on a separate server, reducing application latency and improving overall system performance.
- Integrated Sentry with Django backend for monitoring error logs and resolving them, ensuring robust application monitoring and proactive error resolution.
- Employed containerization techniques with Docker-compose for rapid deployment and Nginx as a reverse proxy for efficient routing of HTTP and WSS requests.
- Utilized GCSFuse for mounting Google Cloud Storage buckets to the server, facilitating seamless access to cloud storage resources. Videos processed on the platform were directly saved to the bucket, ensuring efficient storage and accessibility.
- Utilized Postman for API testing, ensuring the reliability and functionality of backend APIs.
- The site can successfully handle concurrent users upto atleast 10000 users without any significant reduction in responsiveness.

Tata Consultancy Services Pvt. Ltd.   *Hyderabad (T.G.), India*
Backend Developer   *Nov 2021 - Jun 2022*
- Played a pivotal role as a Backend Developer at Tata Consultancy Services (TCS), contributing to the development and maintenance of critical backend functionalities.
- Utilized Play Framework based on Java to architect and implement robust backend solutions, ensuring high performance and reliability of web applications.
- Also wrote JUnit tests to ensure the quality and accuracy of backend code, rigorously testing for inaccuracies and bugs.
- Collaborated closely with cross-functional teams to understand project requirements and deliver tailored backend solutions that met client needs and specifications.
- Played a key role in generating reports and logs using JIRA and build tools, providing valuable insights into project progress and ensuring effective communication within the team.
- Actively participated in code reviews and knowledge sharing sessions, contributing to the continuous improvement of development processes and best practices within the organization.

Internship

Coshal Arts Pvt. Ltd. *Remote*

Web (Backend) Developer *Mar 2020 - May 2020*

- Led a team of two other backend developers in creating an e-commerce website backend, focusing on payment gateway integration using Razorpay and code quality improvement.
- Implemented Django signals for better organization of backend processes and utilized AWS EC2 for website hosting.
- Responsible for developing back-end for their E-Commerce Platform.
- Handled user authentication using Django with custom authentication backend.
- Used SendINBlue's API to send transactional emails.

Projects

Bacterial Image Classification using Deep Neural Networks *Raipur (C.G.), India*

NIT Raipur *Nov 2020 - Feb 2021*

- Developed a project utilizing Keras, Python, and transfer learning techniques for image classification using microscopic images.
- Implemented convolutional neural networks (CNNs) to classify bacterial images with high accuracy.
- Conducted extensive experimentation and fine-tuning of model hyperparameters to optimize performance and achieve reliable results.
- Trained Xception DNN over DIBaS Dataset.
- Hosted the project with Django in Azure.

Venture Capitalist Website *Durg (C.G.), India*

Sucseed Indovation Fund *Aug 2020 - Sep 2020*

- Collaborated with venture capitalists to develop a website using Django, PostgreSQL, and hosted it on DigitalOcean with Nginx.
- Implemented backend functionalities, admin panel customization, and email notification systems, ensuring a seamless user experience.
- Integrated Django admin panel modifications, HTML/CSS integration with Django backend, and template rendering, enhancing the website's functionality and aesthetics.
- Configured SMTP and DNS settings, listed the domain in Google search index, and integrated captcha verification to enhance security and prevent spam.
- Developed a notification system for real-time updates, enabling efficient communication between users and administrators, contributing to increased user engagement and satisfaction.
- Added the website to the Google Search Index by verifying ownership of the domain and to get the better reachability.

Skills

Programming	Python, Java (Intermediate)
Web Development Frameworks	Django, Flask, Play Framework
Soft Skills	Time Management, Teamwork, Problem-solving, Leadership
Database Management	PostgreSQL, SQLite
Cloud Technologies	AWS, Google Cloud Platform (GCP). Azure
Version Control	Git
Containerization	Docker, Docker-compose
Docker Registry	Dockerhub, AWS ECR
Other Tools	VSCode, Nginx, Celery, ffmpeg, Postman

Certifications

Microsoft Certifications *Durg (C.G.), India*

... *May 2022 - Jun 2022*

- Microsoft Certified: Azure Fundamentals
- Microsoft Certified: Azure Data Fundamentals
- Microsoft Certified: Azure AI Fundamentals

Languages

English	Professional proficiency
Hindi	Native proficiency

References available upon request.