

Jay D Patel

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SUMMARY

- Experienced Software Developer with a **4-year** background in Python and Node with a strong foundation in software development concepts, algorithms, and data structures.
- Optimized API performance by employing **caching** strategies and **pagination** techniques, resulting in improved response times.
- Practical involvement in querying both relational databases like PostgreSQL, MySQL, and Oracle, as well as non-relational databases.
- Worked on diverse architectural patterns (Monolithic Apps, **Microservices**, Serverless), tailoring testing methodologies for each.
- Implemented robust strategies for comprehensive database optimization, seamlessly **scaling** databases to manage increased workloads.
- Executed comprehensive testing strategies, including unit testing with **Pytest**, ensuring high application robustness and reliability.
- Implemented responsive design patterns in **React** and **Angular** for optimal user experiences across diverse devices and screen sizes.
- Enhanced platform **security** through robust user authentication and authorization using **Allauth**, **OAuth**, and **JWT** tokenization.
- Developed RESTful APIs using **Django REST Framework**, ensuring seamless communication between front-end and back-end systems.
- Partnered with DevOps to deploy **Terraform** modules, ensuring microservices consistency across development and production.
- **Optimized** performance by targeting the slowest 20% of the code, adhering to the 80/20 rule and achieved **80%** improvement.
- Stayed up-to-date with latest trends and technologies in software development and applied them to enhance the software performance.

EXPERIENCE

SOFTWARE DEVELOPER, Applied Informatics, May 2022 – Current

- Integrated **RESTful APIs** into the React application, enabling seamless communication with the backend for data retrieval and updates.
- Utilized Django's Object Relational Mapping (**ORM**) for streamlined database operations and data consistency (ACID compliance).
- Used **JavaScript** for Dynamic Page Functionality, popup screens, and user entry validations.
- Integrated third-party APIs and payment gateways into the **React Js**, ensuring secure online transactions for customers.
- Participate in **code reviews** to ensure adherence to coding standards and best practices.
- Proficient in writing unit tests using **Pytest**, a widely adopted testing framework in the Python ecosystem.
- Collaborate with **cross-functional** teams to integrate software components and resolve technical issues.
- For Real time inventory update and live chat support, I used **websocket** functionality to enhance interactivity for the users.
- Developed **webhook** based automated order fulfillment notifications for streamlined ecommerce payment processes.
- Used caching policies within **CDN** setups, reducing server load and bandwidth consumption while maintaining content freshness.
- Orchestrated **Docker** containers for Python and Node.js applications, ensuring consistency in development, testing, and production.
- Managed **Kubernetes** clusters, configuring nodes, optimizing performance and ensuring high availability for mission-critical applications.
- Communicated bugs and issues found through the **automation** process to the development team.
- Managed and optimized microservices data storage using popular RDBMS systems like MySQL and PostgreSQL.

PYTHON DEVELOPER, EbizzInfotech, Jan 2019 - July 2021

- Utilized **Django** ORM for modeling and interacting with PostgreSQL and MySQL databases, ensuring efficient data storage and retrieval.
- Ensured **Django** app security with best practices, preventing SQL injection and XSS vulnerabilities.
- Defined well-structured classes and interfaces in Python, adhering to **OOD** principles for encapsulation, abstraction, and inheritance.
- Utilized Django Debug Toolbar to identify and resolve performance **bottlenecks**, ensuring optimal application performance.
- Tuned database performance by optimizing **SQLAlchemy** queries, indexing strategies, and caching mechanisms.
- Created functions, triggers, views, and stored procedures using MySQL and PostgreSQL relational Databases.
- Executed cross-browser **testing** for web apps using tools like **Selenium** in conjunction with Python and Node.js test frameworks.
- Put to use Amazon **DynamoDB** as a **NoSQL** database for storing and retrieving chatbot-related data, ensuring low-latency and high-throughput operations.
- Applied **machine learning** for predictive analytics in inventory management, minimizing stockouts and reducing overstock situations.
- Used Python libraries Pandas, NumPy, and Matplotlib to **create charts** that display a patient's lab results.
- Established proactive monitoring practices using **Datadog**, leading to early detection of performance bottlenecks and potential issues.
- Where Server needs to send data to clients in a low-latency manner. I used **SSE** technology.
- Integrated CI/CD with version control systems such as **Git**, automating the deployment process triggered by code changes.
- Conducted thorough testing of **REST APIs**, including unit testing and integration testing, to validate functionality and identify potential issues.

EDUCATION

MS in Computer and Information system, New Jersey Institute of Technology

BE in Mechanical Engineering, Gujarat technological University

TECHNICAL SKILL

- **Front-end Tech:** React JS, Angular, HTML, CSS, SASS, LESS, TypeScript, jQuery, JSON, XML, BootStrap, Material UI
- **Programming Languages:** Python, jinja, Node.js, C sharp, Java, Go, Javascript, SQL and NoSQL
- **Web Frameworks:** Django, Flask, FastAPI, CherryPy, WebPy, React, Angular, Vue, Jupyter Notebook, Google Colab
- **Database Technologies:** MySQL, PostgreSQL, MongoDB, Redis, Neo4j, Cassandra, Firebase
- **Python Libraries:** NumPy, Pandas, Matplotlib, Seaborn, BeautifulSoup, SQLAlchemy, Celery, Django REST framework
- **Testing Tools:** pytest, unittest, pdb, cProfile
- **Architecture tools:** RabbitMQ, Kafka, Jenkins, gRPC