Vinit Kumar

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Skills

Programming Languages:

- Proficient in Python, JavaScript, TypeScript, PHP and C.

DevOps Expertise:

- Extensive experience with cloud platforms like AWS, Google Cloud Platform, and DigitalOcean.
- Extensive experience with CI/CD pipelines with Github Actions and Bitbucket Pipelines.

Web Development Stack:

- Strong proficiency in web frameworks like Django, FastAPI, Laravel, and Express.js
- Extensive experience building messaging queues with Celery, RabbitMQ, Redis.
- Database expertise with PostgreSQL, MySQL, Mongo, Sqlite, and Redis.
- Experience implementing search engines with Elasticsearch.
- Application Development with modern React.

Testing Proficiency:

- Skilled in Unit Testing and Test-Driven Development (TDD).
- Proficient in Pytest, Vitest, and PHPUnit.

Experiences

Staff Software Engineer, KidsKonnect (prev SocialSchools B.V.)

Feb, 2013 - Present

Major tech used: (Django, FastAPI, Laravel, PostgreSQL, SQL Server)

Pune, India

I currently work as the Tech Lead in the Websites and Onboarding Team at kidsKonnect. I prefer writing clean and pragmatic code that delivers value to the product.

Following are <u>some of my work highlights</u> working with SocialSchools B.V. (acq by KidsKonnect in 2021) and now as a part of KidsKonnect:

- Implemented a highly scalable, distributed multi-tenant CMS in Python that powers over 2500 domains, providing a seamless experience for end users.
- Leading the development of Enrollment Form and CRM system to onboard new potential customers in the Day care and Primary Education market in The Netherlands.
- Developed and deployed an in-house monitoring and scanning tool to generate real-time uptime reports for all domains in our cluster, ensuring reliability and performance.
- Initiated a side-project in Go to leverage its fast and cheap concurrency and efficient memory usage model to track analytics.
- Leveraged Celery and RabbitMQ to implement a distributed task queue for processing complex, compute-heavy background jobs and cron tasks, improving efficiency and speed.
- Improved the experience index for end users through targeted performance optimization and optimization of key metrics.
- Implemented a serverless provisioning system in AWS, reducing implementation time by 90% and providing greater flexibility and scalability.
- Built a media processing system that is capable of handling a wide range of video formats and scales seamlessly with changing workloads.
- Developed ReSTful APIs using the Django Rest Framework, enabling easy integration with web and mobile applications.
- Integrated performance monitoring tools like new relic and sentry to track key metrics and ensure optimal performance.
- Set up CI and automated checks for code quality, improving the reliability and maintainability of the codebase.
- Led the containerization of the codebase, allowing for local development on any operating system and providing greater flexibility for the development team.
- Implemented code review workflows and best practices, fostering a culture of collaboration and continuous learning within the team.
- Mentored junior colleagues on Django and React-based development, sharing knowledge and expertise.
- Implemented two-way communication between distributed nodes using JSON Web Tokens (JWT), improving the reliability and performance of the system.
- Enhanced the security of the application and worked closely with the cloud provider to mitigate potential attacks.
- Maintained close communication with the cloud provider's DevOps team and the CTO, ensuring that our system is always running at peak performance.
- Successfully scaled services to handle millions of requests per month, enabling the platform to grow and evolve as needed.

- Implemented testing workflows and best practices, encouraging the team to prioritize writing tests as a core part of the development process.
- Optimized cloud spending through the implementation of auto-scaling and right-sizing instances, maximizing the value of our investment in cloud infrastructure.

Jan, 2010 – Present

Free Software

Volunteer software developer for Open Source projects in free time

- Core maintainer at Django CMS.
- Primary author and maintainer of <u>json2xml</u> used by developers at <u>Google, Amazon, & Nasa among others</u>.
- Implemented a chatbot in C.
- Primary author and maintainer of <u>node twitter</u>, a twitter clone written in node and MongoDB.
- Primary author and maintainer of white paper, a top-10 Jekyll theme.

Education

Bachelor of Engineering

July, 2008 - April 2012

Birla Institute of technology, Mesra

Specialization: Python Programming, Linux, C

Graduation project: Use genetic algorithm to predict sedimentation rate for the reservoirs in India

Recommendations

<u>List of recommendations</u> from colleagues and collaborators in OSS projects.