



David Nixon

Backend Developer with a Focus on Scalability and Automation

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<https://www.davidwnixon.com/Résumé>


SUMMARY

Experienced backend software developer with years of expertise in building and maintaining scalable web applications. Adept at designing robust system architectures, optimizing performance, and automating processes. Skilled in API development, and secure system integrations. Proven ability to lead development teams, mentor engineers, and deliver high-quality software solutions within deadlines and budget constraints. Recognized as a Senior Technical Staff Member (STSM) at IBM.

EXPERIENCE

Senior Backend Developer

IBM

 2020-present

Work as a backend developer leading development teams to deliver internal web applications and client-facing 3D immersive experiences for IBM's marketing department.

- Designed and implemented scalable backend architectures for multiple applications using JavaScript frameworks

SKILLS

Client side

Vue.js Nuxt.js Next.js React
tailwindcss JavaScript npm yarn
pnpm HTML CSS SCSS

Server side

Serverless (Code Engine, Functions)
Microservices openid OAuth
Secure endpoints with API keys
PostgreSQL Db2 Couchdb
Cloudant Express
REST APIs design php


DevOps

CI/CD Docker Travis
GitHub Actions Jenkins Git
GitHub Jira IBM Cloud AWS
cron jobs

- Developed and maintained RESTful APIs to serve global content management systems, enhancing accessibility and performance.
- Spearheaded the migration of legacy systems to modern, containerized architectures, ensuring scalability and maintainability.
- Implemented secure authentication and authorization mechanisms using OpenID and OAuth to safeguard sensitive data.
- Collaborated with cross-functional teams to define backend requirements, ensuring seamless integration with front-end applications.
- Improved backend logging, monitoring, and debugging tools, enhancing system observability and reducing downtime.

Senior Front-End Developer

IBM

 2018-2020

Work as a Front-End developer leading development teams to deliver internal web applications for stakeholders in IBM Marketing.

- Developed dynamic and responsive web applications using Vue 3, implementing reusable components and state management with Vuex/Pinia to enhance application performance and maintainability.
- Collaborated with UI/UX designers in Figma to transform wireframes and mockups into pixel-perfect, interactive front-end interfaces, ensuring a seamless user experience.
- Styled and customized web applications using Tailwind CSS, rapidly prototyping layouts and applying utility-first design principles for efficient and maintainable styling.
- Integrated secure user authentication and authorization with OpenID Connect, implementing token-based authentication flows and session management for robust identity management.
- Consumed RESTful APIs to fetch, display, and manipulate data, implementing error handling, data caching, and performance optimizations for a smooth user experience.
- Optimized front-end performance through code-splitting, and lazy loading, reducing initial load times and enhancing client-side rendering.
- Led front-end code reviews and mentoring sessions,

Languages

JavaScript C++ Java Python

Bash zsh

CERTIFICATIONS

Senior Technical Staff
Member (STSM)

IBM

Data Privacy Advocate

Credly

Open Source Strategic
Committer

IBM

Enterprise Design Thinking
Practitioner

Credly

C++ Gold Level

HackerRank

Sql Bronze Level

HackerRank

Linux Shell - 100%


HackerRank

providing guidance on best practices for Vue.js, responsive design, and modular component development.

- Implemented unit and end-to-end tests for front-end components using Jest, ensuring high code quality and coverage.
- Streamlined development workflows by integrating automated deployment pipelines using CI/CD tools, ensuring consistent delivery and quality of front-end updates.

Senior DevOps Engineer

IBM

 2016-2018

Automated the deployment of event marketing web applications to IBM.com, increasing security, reliability, and speed-to-deployment.

- Managed CI/CD pipelines using Travis and Docker, streamlining deployment processes and reducing downtime for all projects.
- Designed and implemented containerized applications using Docker and orchestrated them with Kubernetes (Code Engine), ensuring scalability and reliability.
- Automated deployment processes and infrastructure provisioning in IBM Cloud, reducing manual intervention by 95%.
- Conducted monitoring of applications using tools like Instana, enhancing operational efficiency.
- Collaborated with developers to implement best practices in code quality and security, including peer programming and code walk throughs resulting in a 50% reduction in production bugs.

EDUCATION

Bachelor of Science in Computer Engineering

Auburn University

PROJECTS

Event Content Curation

- Developed a full-stack web application using Vue and Node.js, integrating PostgreSQL for data storage and management.
- Implemented CI/CD pipelines to automate testing and deployment on IBM Cloud, achieving compliance to data and security requirements, ensuring stability, and enabling observability

Client Journey

- Designed an architecture for enabling client to collaboratively review plans for on-site engagements with SME before the engagement begin which allowed deals to close faster.
- Designed the CI/CD pipeline, utilizing Docker and Code Engine (Kubernetes) for deployment.
- Leveraged Cloudant/CouchDB for NoSQL data storage, optimizing application performance.

- Designed simple backoff scheme to accommodate low rate-limit APIs which resulted in 10% saving in db infrastructure costs

OPEN SOURCE

- Member, Call for Code (Linux Foundation)
- Lead Contributor, Carbon Vue components