Joshua Dickie

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Software engineer with 4+ years delivering production backend APIs and infrastructure automation for enterprise clients. Experience owning full-stack design, CI/CD pipelines, high-availability systems, and integrating complex SaaS platforms.

Work Experience

ICT Networks Pty Ltd
Systems Engineer | *2021 - Present*

- Designed, developed, and maintained high-availability Express-based APIs and managed service platforms for S&P/ASX200 clients across multiple industries, delivering >99.99% uptime and fault-tolerant data retention in production environments.
- Built distributed audit logging system for multi-state ISP operation, utilising Express and MySQL to process telemetry from 80k+ concurrent ISP subscribers, handling hundreds of thousands of daily events under 99.99% uptime SLAs and complying with national metadata retention requirements.
- Led CRM data migration, normalizing over 500k records across Salesforce, Hubspot, Mobileforce, and Freshservice, integrating SaaS platforms via custom APIs, webhooks, and backend middleware.
- Served as technical lead on multiple projects, coordinating with product managers, stakeholders, and domain experts to ensure successful delivery.
- Cut deployment time from hours to minutes by automating deployment pipelines using Ansible, Docker, Gitlab CI/CD, and AWS infrastructure-as-code workflows, improving system scalability and reducing manual errors.
- Eliminated redundant manual workflows and automated business processes across multiple departments by delivering internal software tools in Python, Node.js, and Java/Scala.

Projects

NSW State Emergency Service Volunteer Development
- Iterated on MERN app for real-time GPS tracking of hundreds of thousands of dollars' worth of high-value assets used by NSW SES (State Emergency Services) in emergency response situations via Google Maps API integration.
- Developed Node.js accounting and auditing software to process volunteer timesheets and training hours, reducing manual data entry and eliminating recurring administrative burden across 10k+ volunteers while improving reporting accuracy.

NSW Farmers Carbon Credit Accounting Software
- Developed Wordpress/PHP webapp enabling farmers to track carbon usage, optimize government incentive eligibility, and maximise carbon credit allocation.
- Partnered with project and community stakeholders to iterate on development and feature design in an Agile delivery model, incorporating end-user feedback into multiple release cycles.

KillTeam Companion - a tabletop game companion app
- Developed and deployed full-stack MERN app for local miniature wargaming community, designing REST API, MongoDB schema, and React frontend to support real-time game state tracking.
- Managed end-to-end deployment on self-hosted infrastructure using GitLab CI/CD pipelines, automated backups, and isolated DMZ network configuration.

Core Technologies

Languages: Javascript, Node.js, Python, Java, Scala, C++, PHP, SQL, Bash, Shell, HTML, CSS
Frameworks, Packages, & Libraries: Express.js, React, React Native, Vue.js, Angular, Pandas, NumPy, Django, Flask
Tools, Platforms, & Systems: Linux, AWS, Elasticsearch, ELK Stack, Kibana, Logstash, MySQL, PostgreSQL, MongoDB, Ansible, Zabbix, Git, Gitlab CI/CD, Jenkins, Docker, Docker Compose, Oxidized, HAProxy, Nginx
Methodologies: Agile, Scrum, Kanban, PMBOK, CI/CD, TDD, Unit Testing, Integration Testing, Red-Green-Refactor, DevOps
Other: Data Pipelines, API Development, REST APIs, GraphQL, Webhooks, Data Warehousing, Distributed Systems, Logging & Monitoring, Infrastructure Automation, Project Management, Technical Documentation

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Education

University of New England (AU)
Bachelor of Computer Science - Software Development & Data Science | *2018-2021*