

Dhivyan Joseph

I'm a full-stack software engineer specializing in high-performance web and mobile applications across SaaS platforms, AR experiences, and cloud-native architectures. My expertise spans serverless infrastructure using AWS, GCP and Vercel, microservice development in Golang and Node.js, and mobile engineering with Flutter. I excel at building scalable backend systems that handle hundreds of thousands of user interactions while maintaining sub-second response times, and designing flexible APIs that integrate seamlessly with third-party services. My technical strengths include cloud infrastructure using Infrastructure as Code principles, secure authentication systems, and robust testing frameworks that ensure product quality throughout rapid development cycles.

Work Experience

Software Engineer API Team	Leonardo Interactive (Canva) leonardo.ai Sydney, Australia	August 2025–Present
• Develop and maintain scalable backend systems and services integrating with AI-powered image generation platforms, supporting rapid user growth and high-performance visual asset creation workflows • Build robust REST and GraphQL APIs using Node.js and TypeScript, collaborating with cross-functional teams to deliver production-quality features for creative content generation • Optimize backend performance and system architecture to ensure seamless user experience across the platform's AI-powered visual creation tools and services • Implement efficient database solutions and cloud infrastructure patterns to support the platform's growing user base and complex AI service integrations • Participate in code reviews and technical mentoring while staying current with emerging trends in software engineering, AI technologies, and scalable system design		
Software Engineer Core Platform Team	Aura Labs aura-os.com Sydney, Australia	Nov 2023–June 2025
• Architected microservices for Juggernaut app serving 1,000+ users within the first month, implementing REST APIs with <200ms response times and achieving 95%+ test coverage through CI/CD automation • Led development of Google Pixel AO activation platform processing 6,800+ real-time photo captures with AI watermarking, generating 10,700+ downloads and achieving 1.56x sharing ratio between an average of 480 daily unique fan visits at Australian Open 2025 • Engineered Constellation recommender system API utilizing collaborative/content-based filtering algorithms to deliver hyper-contextual content recommendations for client platforms • Built Premier League ecommerce microservices integrating Flutter applications with backend services, delivering comprehensive product management and purchase flow systems in Shopify applications • Implemented infrastructure as code using Pulumi and AWS SDKs, maintaining consistent deployments and reducing configuration drift between development/production environments • Design and developed CICD pipelines and test runner environments with Github Actions for Constellation, Juggernaut and other Aura pre-deployment testing suites		
Backend Developer Developer Team	Unbound unbound.sydney Sydney, Australia	Nov 2024–Feb 2025

- **Developed AR campaign platform** for Data Pinata handling 3.1M+ game sessions across 230K+ users with 99.9% uptime, processing 50,000+ daily interactions with <200ms response times
- **Architected Garmin/Strava rewards system** for Hahn Beerlay tracking 9,000+ running activities and 77,000+ kilometers, distributing rewards to 4,800+ users with zero security incidents
- **Built serverless Next.js backends** with Prisma ORM maintaining sub-second response times during peak loads, successfully handling automated prize distribution and real-time analytics
- **Engineered a prizing vendor server** allowing third-party developers to integrate prizing distribution, reporting and fulfilment functionality for 200k+ users
- **Developed OAuth 2.0 authentication** systems with JWT session management achieving 100% uptime during 60-day campaigns with instantaneous reward distribution

Software Developer

Backend Engineering Team

Frameplay | frameplay.gg

Melbourne, Australia

Apr 2022–June 2023

- **Developed automated image processing service** using AWS Lambda reducing manual ad asset processing time by 90%, converting creative assets into multiple formats/aspect ratios at scale
- **Built GraphQL testing framework** executing 600+ daily test cases with 90%+ coverage, reducing MTTR for API issues and achieving 99.9% execution reliability
- **Architected reporting REST API** on serverless stack enabling client self-service data access, reducing customer onboarding by 50% and API support tickets by 70%
- **Engineered scalable microservice** with Golang processing advertising assets across gaming platforms, implementing Infrastructure as Code reducing deployment time from hours to minutes
- **Designed automated testing suite** for Role-Based Access Control validating permissions across user types, ensuring consistent security enforcement platform-wide

Web Developer

Self-Employed

Freelance

Remote

Nov 2018–Apr 2024

- **Delivered custom web solutions** for SME clients using React/Tailwind CSS, achieving 40% average improvement in mobile conversion rates through responsive design
- **Developed NFT raffle platform prototype** demonstrating full-stack development with React/smart contracts
- **Implemented Discord automation bots** using Discord.js and Python reducing community management overhead by 60% for online gaming communities
- **Built RESTful APIs** integrating with third-party services including payment gateways and CRM systems, enabling automated workflows for clients
- **Created static/dynamic websites** deployed on DigitalOcean with custom CI/CD pipelines, maintaining 99.5%+ uptime across client portfolio

Account Executive

Commercial Insurance Broking Team

Moody & Kiddell

Sydney Australia

May 2021–Nov 2021

- **Managed \$3M+ portfolio** of construction and earthmoving clients, achieving 92% client retention and 15% revenue growth
- **Led strategic business development** that opened new revenue streams for insurance broker teams across Australia
- **Spearheaded Salesforce implementation**, improving CRM efficiency by 35% and enabling data-driven marketing strategies
- **Secured key partnerships** that generated \$500K+ in new business revenue within first quarter

Bid & Implementation Manager Commercial and Pricing Operations	TAL Life Limited Sydney Australia	Jun 2019–Jun 2020
• Led implementation of Insurance Online platform for 5 major superannuation clients, managing teams across technology, actuarial, product, and risk • Successfully delivered 3 PMIF/PYS regulatory projects ahead of schedule, ensuring compliance with royal commission recommendations • Managed large-scale tenders worth \$20M+ in annual premiums, winning 60% of competitive bids • Reduced project delivery time by 30% through agile methodology implementation and cross-functional team coordination • Created self-service portals for 300K+ members, increasing digital engagement by 45%		
Account Executive CommInsure Master Trust & Corporate	Commonwealth Bank of Australia Sydney Australia	Mar 2016–Jun 2019
• Managed \$21M portfolio of group life insurance accounts for 200+ corporate clients, achieving 95% renewal rate • Secured \$13.9M in new business through strategic account wins (KPMG Group Super, Qantas/Jetstar Groups) • Developed 4 innovative insurance products driving 25% increase in policyholder retention • Reduced claims processing time by 40% through streamlined underwriting processes • Led pricing and data analysis initiatives that improved profitability by 12% across corporate segment		
Loss Adjuster Commercial and Large Loss	Crawford & Company Sydney Australia	Jan 2016–Apr 2016
• Settled 250+ property claims across NRMA, Suncorp, Allianz, AAMI, and QBE portfolios • Achieved 98% customer satisfaction rating through effective stakeholder management • Reduced claims processing time by 20% through systematic vendor coordination • Developed monthly analytics dashboard driving efficiency improvements across adjusting team • Trained 5 colleagues on best practices for complex claim investigations		
Sales Consultant NRMA	Insurance Australia Group Sydney Australia	Jan 2015–Dec 2015
• Achieved 130% of sales target consistently ranking top 5 in region • Delivered 95% customer satisfaction through consultative selling approach • Generated 40+ customer referrals monthly through exceptional service • Reduced processing errors by 15% through improved training documentation • Implemented new sales scripts that increased conversion rate by 25%		
Client Manager Home and Contents Claims	The Hollard Insurance Company Sydney Australia	Sep 2013–Apr 2014
• Managed 500+ claims portfolio across storm, theft, fire, and legal liability categories • Achieved 95% first-touch resolution for standard claim processing • Reduced claims leakage by 30% through fraud detection and escalation • Streamlined vendor coordination reducing claims cycle time by 20% • Maintained settlement reserves within monthly KPIs and targets		
Sales Agent Contact Center	The Hollard Insurance Company Sydney Australia	Feb 2012–Sep 2013

- **Consistently achieved monthly sales target** through strategic prospecting and consultative selling approach across Real Insurance Home & Contents, Motor, and Travel Insurance production
- **Awarded annual Hollard Leadership Award** for 3 straight months of record targets met
- **Maintained high customer satisfaction** rating through personalized policy explanations, follow-up process and customer feedback results in surveys
- **Cross-sold additional coverage products** generating additional revenue per customer interaction
- **Collaborated with underwriting team** to streamline application processing, reducing approval time

Education and Certifications

- **Bachelor of Computer Science**, Western Sydney University **2023–Current**
- **Higher School Certificate**, Kellyville High School **2008**

Technologies and Languages

- **Languages:** TypeScript, JavaScript, Go, Dart/Flutter, Node.js, Python, SQL (MySQL, PostgreSQL), GraphQL, HTML5, CSS3
- **Frontend:** React, Next.js, Svelte, Angular, Tailwind CSS, Jest (testing), Flutter, Provider pattern
- **Backend:** AWS Lambda, Express.js, Serverless architecture, Prisma ORM, REST API design, Golang, Nginx, microservices
- **Cloud & DevOps:**
 - **AWS:** Lambda, S3, API Gateway, CloudFormation, Step Functions, Athena, RDS, ECS, Beanstalk, CloudWatch, XRay, AppSync, Cognito
 - **Infrastructure as Code:** Pulumi, CloudFormation
 - **CI/CD:** CircleCI, GitHub Actions
 - **Containerization:** Docker
 - **Platforms:** Vercel
 - **Digital Ocean:** Droplets and Serverless Functions
- **Databases:** MySQL, PostgreSQL (Aurora), DynamoDB, Redis, PlanetScale, Amazon Athena
- **Search & Analytics:** OpenSearch, Elasticsearch
- **Authentication:** OAuth 2.0, JWT, Role-Based Access Control (RBAC), API Key authentication
- **Tools & Version Control:** Git, GitHub, BitBucket, JIRA, Confluence
- **Mobile:** Flutter, Dart
- **AR:** PlayCanvas AR
- **APIs & Integrations:** RESTful APIs, GraphQL APIs, SportRadar, Garmin, Strava, OpenAPI/Swagger, External payment systems
- **Architectures & Patterns:** Microservices, Serverless architecture, Event-driven architecture, Distributed systems design
- **Specialized Skills:** Real-time data processing, Image processing pipelines, AR/VR development, High-performance system optimization, Database schema design

Projects

Data Pinata AR Campaign Platform | datapinata.nz

[Datapinata.nz](https://datapinata.nz) uses AR technology to turn people's mobiles into a virtual piñata game, where they can whack a Data Piñata to win free data and prizes - [read more](#).

Technologies: Next.js, TypeScript, Vercel, Prisma ORM, PostgreSQL, PlayCanvas AR, JWT, Tailwind CSS, Auth0

- Serverless backend handling 3.1M+ game sessions across 230K+ users with 99.9% uptime
- Real-time AR gameplay integration with automated prize distribution system
- Fault-tolerant architecture maintaining <200ms response times at 50K+ daily interactions
- Comprehensive analytics dashboard with real-time metrics and reporting

Hahn Beerlay Rewards Platform | hahnbeerlay.com.au

Running rewards platform partnered with Garmin and Strava where users and teams earn prizes over 30 days of running and achieving milestones.

Technologies: Astro.js, AWS Lambda, PlanetScale MySQL, OAuth 2.0, JWT, Garmin/Strava APIs

- Full-stack rewards system integrating third-party activity tracking APIs
- Secure authentication supporting multiple OAuth 2.0 flows
- Scalable database schema processing 9,000+ activities and 77K+ kilometers
- Real-time validation and processing pipeline for activity submissions

Google Pixel AO Activation Platform

Real-time image capture and processing platform showcasing Google Pixel 9 camera capabilities at Australian Open 2025. Read more about the project in this [press release](#).

Technologies: Astro.js, AWS Lambda, PlanetScale MySQL, OAuth 2.0, JWT, Garmin/Strava APIs

- Real-time image processing system with AI watermarking capabilities
- High-performance pipeline handling peak loads of 500+ daily uploads
- Comprehensive conversion tracking and social sharing system
- Microsite handling 10,700+ downloads with integrated analytics

Juggernaut AFL Tipping Application | juggernaut.game

Mobile sports tipping application for Australian Football League (AFL) with competitive leagues and real-time scoring.

Technologies: Express.js, AWS Lambda, Aurora PostgreSQL, Prisma ORM, REST API, Jest, Pulumi

- Core game logic service serving 1,000+ users with <200ms API response times
- Comprehensive test suite with near 100% coverage using Jest
- Infrastructure as Code implementation ensuring consistent deployments
- Containerized development environment mirroring production setup

Aura Constellation Recommender System

AI-powered content discovery platform delivering personalized media and product recommendations across digital ecosystems.

Technologies: OpenSearch, HuggingFace Sentence Transformers, REST API, Machine Learning Algorithms (KNN), AWS Lambda, DynamoDB

- Hybrid recommender engine combining collaborative and content-based filtering
- Scalable API serving hyper-contextual content recommendations
- Real-time processing of user behavior and preference data

- Integration with client platform ecosystems

Frameplay Image Processing Service

Cloud-native image processing service converting advertising assets into multiple formats for in-game ad placement across gaming platforms.

Technologies: Golang, AWS Lambda, S3, CloudFormation, RESTful API, Docker

- Automated asset transformation system for multi-platform ad delivery
- Microservice architecture supporting JPEG/WebP conversion at scale
- Infrastructure as Code reducing deployment time from hours to minutes
- Optimized processing pipeline for multiple aspect ratios and quality levels

GraphQL Testing Framework

Comprehensive automated testing suite ensuring API reliability and security across production GraphQL endpoints.

Technologies: Node.js, Jest, GraphQL, Role-Based Access Control, JWT, CI/CD

- Automated testing framework executing 600+ daily test cases
- Snapshot-based testing strategy for schema validation
- Comprehensive RBAC validation across multiple user roles
- Continuous testing pipeline with detailed performance reporting

Frameplay Reporting REST API

Self-service reporting platform providing advertisers with programmatic access to in-game advertising performance metrics.

Technologies: AWS API Gateway, Lambda (Go), Amazon Athena, MySQL/RDS, CloudFormation

- Serverless architecture enabling client-side performance data access
- Secure API key authentication with client dashboard integration
- High-performance query interface supporting complex data filters
- MySQL to Athena data pipeline optimization for large-scale reporting

NFT Raffle Platform (Open Source)

Decentralized application enabling transparent NFT raffles using blockchain smart contracts and Web3 integration.

Technologies: React, Web3.js, Solidity, ERC721, MetaMask Integration, Tailwind CSS

- Smart contract development for decentralized raffle mechanics
- Frontend interface for wallet connection and NFT participation
- Event-driven architecture for automated prize distribution
- GitHub: <https://github.com/d1joseph/RaffleNFT>

E-Commerce Flutter Package (Aura Platform)

Reusable Flutter SDK enabling rapid e-commerce feature integration in existing mobile applications.

Technologies: Flutter, Dart, Provider Pattern, RESTful API Integration, Responsive Design

- Highly configurable product showcase widget system
- Dynamic content fetching with backend CMS integration
- Responsive carousel and product customization components
- Complete purchase flow with social interaction features

Interests

- PC gaming, wargaming, board gaming
- Learning about history, ancient and modern
- Painting miniatures
- Developing personal projects