

MARK CUSTARD

QA & AUTOMATION ENGINEERING LEAD

Ridgefield, WA · Remote

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QA engineer with 7+ years across fintech, insurance and entertainment — including Netflix acquisition platforms and enterprise Salesforce integrations — now sole engineer of a live production booking platform built test-first behind a 13,600-test suite (pytest, Vitest, Playwright) running in CI on every push. I build the systems as well as the tests, so my testing is informed by how software actually breaks.

CAPABILITY SHEET

TEST-FIRST · CI-GATED · PRODUCTION-OWNED

01	TEST & QA	Playwright, Selenium, pytest, Vitest, TDD, BrowserStack — plus exploratory and manual testing, A/B testing, cross-browser and mobile-web coverage
02	STRATEGY	Test-pyramid and coverage design, risk-based prioritisation, mock boundaries that keep suites off production, flake triage, regression-suite ownership, release sign-off
03	AUTOMATION & CI	GitHub Actions, Azure DevOps, CI/CD pipelines, staging→production promotion gates, Testmo, Jira, Agile/Scrum ceremonies
04	ENGINEERING	Python, JavaScript, TypeScript, React/Vite, FastAPI, SQL, PostgreSQL, Pandas
05	API & DATA	REST, Postman, ChaiJS, webhook verification, Stripe, Salesforce, Cosmos DB, BigQuery, Anthropic API
06	DELIVERY	Railway deployments, environment and secret management, log-based monitoring and alerting, incident triage, 24/7 production support

EXPERIENCE

Lead Engineer, Full Stack & Quality — TAG Parking

Sep 2025 – Present · Remote

- Own and maintain a **13,600+ test suite** (10,500 pytest, 2,100 Vitest, 1,000 Playwright E2E) written test-first: mocked unit and integration layers that never touch production, E2E validation in staging, and CI gating every push and every staging→production promotion
- Sole engineer for a production airport-parking platform (React/Vite, FastAPI, PostgreSQL, Railway) that has processed **\$208k in bookings** across 1,700 trips for 1,800 customers — architecture, delivery, deployment and 24/7 operational ownership
- Built the Stripe payment stack — PaymentElement, Apple Pay, Google Pay, Link, webhook-driven fulfilment, partial refunds — with idempotent, race-condition-free booking creation; diagnosed a mobile checkout drop-off and recovered **~\$5.7k/quarter** in abandoned conversions
- Found and fixed a cross-night comparison defect in the occupancy engine that was silently blocking bookable weekend inventory; hardened per-night capacity limits across overnight stays with regression coverage
- Engineered an automated roster and scheduling engine: template-driven shift generation, capacity-aware assignment, driver-qualification rules, overlap detection and a live operational view of each driver's run

- Integrated live flight-board scraping (30-minute cadence, 3,700+ flights tracked) with automated delay detection that recalculates customer pickup times, SMS-alerts staff and reorders drivers' jobs into true operational sequence
- Built competitor-aware dynamic pricing — automated scraping of the incumbent's rates, a tunable discount matrix, per-band conversion tracking — plus a promotions engine driving 1,000 redemptions worth **\$19.9k**
- Shipped LLM features on the Anthropic API under adversarial security review: a customer FAQ assistant, a 2FA identity-verified booking assistant with strict data scoping, automated business reporting with generated narrative, and a production log sentinel that triages errors and alerts only on genuine anomalies
- Deliver the full admin platform — financial reconciliation, occupancy forecasting, demand analytics, payroll, DVLA compliance checks — and the automated email/SMS lifecycle behind 515+ five-star Google reviews

QA Analyst — BlueinGreen (Netflix contractor)

Jun 2024 – Jun 2026 · Remote

- Built a Playwright automation framework from zero for the customer acquisition platform, scaling it to **700+ tests** and cutting manual regression effort by **90%**
- Validated performance and correctness of the primary acquisition pages supporting systems that contribute to **\$1.2B** in subscription revenue
- Led migration testing between vendor platforms and logged the critical defects that kept the cutovers seamless

Senior QA Engineer — Embrace Pet Insurance

Jun 2025 – Dec 2025 · Remote

- Validated Salesforce CRM functionality and data models through the integration of quote-creation tools across multiple brands
- Ran integration testing across Salesforce and Cosmos DB, verifying data synchronisation between insurance systems
- Managed **400+ test cases** in Testmo and automated production releases via Azure DevOps CI/CD

QA Analyst — Stake (fintech)

Mar 2022 – May 2024 · Remote

- API testing with Postman and ChaiJS to validate financial transaction integrity and cross-system data synchronisation
- Automated data-accuracy checks in SQL and Python; integration testing with mocked data for mobile business-process automation
- Cut app crash rates **20%** and improved data accuracy **15%** via BigQuery-based monitoring

EARLIER ROLES

QA ENGINEER, CSC GENERATION — automated validation for new feature integrations and built the regression test cases behind improved defect throughput Jul 2021 – May 2022

SOFTWARE QA ANALYST, KEMPER INSURANCE — functional, integration and regression testing across insurance applications with rigorous defect reporting Apr 2021 – Jul 2021

SOFTWARE QA ANALYST, AMERICAN ACCESS CASUALTY — authored integration test scripts and automated business-requirement validation, improving validation efficiency 25% Jan 2020 – Apr 2021

JUNIOR APPLICATION DEVELOPER, AMERICAN ACCESS CASUALTY — built and validated web applications across the production lifecycle, correcting data-model and reliability defects Oct 2018 – Jan 2020

EDUCATION

FULL-STACK WEB DEVELOPMENT

Actualize Coding Bootcamp · 2018

LLB, BUSINESS LAW

London Metropolitan University · 2006