

ALVIN IMPANG

SOFTWARE QA ENGINEER / SDET / UI TEST AUTOMATION

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SUMMARY

Software QA engineer with 6+ years validating the UI and API of a professional desktop application across Windows and macOS. At Audiokinetic (Sony Interactive Entertainment), extended the Python test framework behind every nightly end-to-end test, found about 500 defects a year across release lines, and co-led weekly UX sprint triage. Diagnoses C++ crashes through call-stack and PDB symbol analysis and verifies features in local builds before submission.

TECHNICAL SKILLS

TEST ENGINEERING	UI and functional test planning, regression and release validation, test frameworks and fixtures, API testing, Playwright, defect triage, root-cause analysis
LANGUAGES	Python, Lua, TypeScript, JavaScript; C++ crash analysis (call stacks, PDB symbols)
CI/CD AND TOOLS	Jenkins nightly pipelines, Git, Gerrit, Jira, ServiceNow, Confluence, AWS CloudWatch and Lambda
PLATFORMS	Windows, macOS, Wwise Authoring API (WAAPI), Unity, Unreal Engine, React, Electron
AI TESTING	RAG and tool-using agent testing, LLM evaluation, embedding-based search scoring
PROCESS	Agile sprints, sprint triage, ISTQB Certified Tester Foundation Level

EXPERIENCE

IS Live Operations Specialist (Part-time)

JAN 2022 - PRESENT

Keywords Studios, Toronto, ON (Remote)

- **Production root cause:** Diagnosed production issues through AWS CloudWatch and Lambda logs, restored service, and verified recovery with users; resolved 4 to 6 tickets per week across internal time-tracking, payroll, and billing systems.
- **Agent verification:** Tested a tool-using RAG agent for invoice validation, covering retrieved data, tool calls, calculated values, exception handling, and final outputs; findings led the team to rescope it to a narrower validator.
- **Data validation:** Validated 300+ invoices per month against Sage and Coretime source data; caught billing defects in under 5% of invoices, traced them to mismatches between systems, and coordinated fixes.

SDET - UX/UI & Wwise Authoring API

JAN 2020 - JUN 2026

Audiokinetic (Sony Interactive Entertainment), Montreal, QC

- **Release validation:** Found and filed about 500 defects a year through functional and regression testing across the current major release, minor releases, still-supported earlier versions, and custom builds for client studios.
- **Test framework:** Maintained and extended 3 Python handlers that scaffold the Wwise Authoring projects and object hierarchies every end-to-end test runs on, across nightly builds on Windows and macOS; added supporting and unit tests, and strengthened assertions in existing Lua tests.
- **Root-cause analysis:** Diagnosed C++ crashes and complex failures through call-stack and PDB symbol analysis; built Wwise Authoring locally to confirm feature readiness before submission.
- **Triage and reporting:** Co-led weekly UX sprint triage on a rotation with the director and the UX designer; reviewed incoming defect and Jenkins test-suite reports and routed each defect to its owning team and target sprint.
- **Integration and code review:** Validated Unity and Unreal Engine integrations, reviewed code, and introduced an enforced pre-merge review checklist adopted by the team.
- **AI feature testing:** Tested the Python scoring suite for Similar Sound Search, the embedding-based AI sound search Sony AI and Audiokinetic built for Wwise, measuring how well results matched text queries and filters.

SELECTED PROJECTS

- **Ekko (release ship gate):** Agent-run release gate that returns SHIP or HOLD per build; maps each acceptance criterion to a measurable must-pass check (for example, SSIM of 0.98 or more on compared render frames), ships only at zero open S1/S2 defects, and returns builds missing a version, commit SHA, changelog entry, or green CI as NOT READY.
- **Robrotaxi (agent dispatch eval, in progress):** Seeded 3D Toronto robotaxi simulation where AI models dispatch a fleet under identical, deterministic conditions, scored on pickup wait, ride delay, and trips per charge against a no-agent baseline. Eval engine in testing with Grok and GPT models.
- **Skill eval with controls:** Designed an eval for a writing-cleanup skill with baseline and placebo arms: 4.72 with the skill vs 4.31 baseline vs 3.82 placebo; skill kept.
- **Agent build workflow:** Directs Claude Code, Cursor, and role-scoped agents (spec, build, QA gate) through a fixed pipeline: research, feasibility gate, locked spec, required verification skills, adversarial review, and a pre-ship gate, with lessons fed back into playbooks.
- **Portfolio (aimpng.me):** Live demos including a self-healing Playwright UI test, a bug-to-fix loop, and an adversarial multi-agent ship gate.

EDUCATION AND CREDENTIALS

ISTQB Certified Tester Foundation Level (CTFL)	MAY 2025
Professional Certificate in Computer Science and Programming · MITx (edX)	JAN 2023
Diploma in Sound Engineering · Nimbus Recording Arts	JAN 2015
Computer Science Coursework · University of Calgary	APR 2014
Certificate in Network Systems Administration · Robertson College	JAN 2013