

Alexandre Guerard

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Staff Software Engineer, focused on C++ and Systems Programming, with 13 years of experience building and contributing to products serving millions of users.

Pragmatic and outcome-driven, with a proven track record of collaborating across teams and disciplines and owning multi-quarter technical vision while delivering incremental wins. Hands-on with large codebases and performance-critical systems, with deep experience creating tools and workflows that accelerate development velocity and improve developer experience.

EXPERIENCE

Frisson Labs, Remote, UK

Feb 2025 - present

Frisson Labs is a seed-funded startup, based in San Francisco, California, developing AI companions for browsing the web.

Lead Engineer

Hired by the company founder, a former manager at Riot Games, to drive and take ownership of the development of core features and infrastructure.

- Architected and delivered production-grade LLM integrations across multiple providers and capabilities (text, multimodal, speech generation) with comprehensive observability, cost controls, retry logic, and latency monitoring.
 - Built Python backend service with HTTP interfaces for dynamic prompt selection based on latency, quality metrics, and A/B testing requirements.
 - Implemented LLM Prompt CMS using Rust, Python and TypeScript, integrated with Redis and Postgres, enabling contributors to create, iterate, and version prompts with full change tracking.
 - Deployed observability dashboards tracking LLM usage patterns, failures, and costs to enable data-driven product decisions.
- Built a comprehensive, real-time observability infrastructure using OpenTelemetry and Grafana for collecting Traces, Metrics and Logs across user-facing and internal services to monitor performance, reliability, and cost.
- Rapidly prototyped multiple features from ambiguous requirements using Python and TypeScript to validate product hypotheses and inform leadership decisions on technical direction.
- Working with CTO and CEO to decide on feature prioritisation, technical direction and build vs. buy decisions.
- Standardised developer tooling and workflows to maximise development velocity and fully utilise AI coding capabilities.
- Maintained architecture and code documentation for contributors and AI tooling integration.

Riot Games, Los Angeles, California, USA

Dec 2019 - June 2024

Riot Games operates the multiplayer online video games League of Legends (LoL) and Teamfight Tactics (TFT).

Staff Software Engineer (Apr 2023 - June 2024)

Senior Software Engineer (Apr 2021 - Apr 2023)

Software Engineer (Dec 2019 - Apr 2021)

Hired with work focused on internal developer tools for LoL and TFT, and promoted to senior and staff roles with impact at the studio level.

- Selected to lead the new Player Experience team, planning technical vision and architecture for major components of the engine's UI systems and associated tooling and data pipeline.
- Tech Lead for the Content Workflow team. Owning the technical roadmap for tooling and workflow improvements. Collaborated closely with art directors, artists and product owners across multiple disciplines (UI, Animation, VFX).
- Played a key role in the launch of TFT in Southeast Asia, a top corporate priority for 2023.
 - Technical lead for the game engine capability updates (UI layout and rendering) to offer first-class support for tablets and mobile form factors.
 - Partnered with QA and UI designers to build backwards-compatible solutions to minimise the review and validation effort required.

- Technical owner of the Localization Pipeline for LoL & TFT. Supporting 19 languages, ensuring that all in-game text data is correctly extracted and marshalled between game design, publishing, and QA teams. Handling concurrent updates with conflict resolution and versioning.
 - Written in C++ and Python, integrating with CI/CD (Jenkins) and Perforce.
 - Continuous work spanning multiple years to reduce the QA workload and engineering support needed for content validation.
- Built a new modern UI editor and engine tooling for the 30+ UI/UX designers working on LoL and TFT, using C++ and Qt, replacing legacy workflows. The project resulted in a promotion.
 - Performed all initial technical tasks and later led a small engineering team in execution.
 - Collaborated with art directors and designers across multiple teams and disciplines.
 - Increased designer satisfaction and efficiency. Simplified creation and validation of UI content across platforms (e.g. PC, tablet, phone) and languages.
- Streamlined data sanitisation and data version management processes using Python, Jenkins, and CI/CD pipeline.
- Mentored junior and mid-level engineers.
- Trusted by multiple Riot Games Teams to conduct technical interviews for junior, mid and senior candidates.
- Served in on-call rotation, overseeing biweekly patch releases. Triaged technical issues and escalated as needed.

Pretend, LLC, Los Angeles, California, USA

May 2011 - Nov 2019

Pretend builds macOS/iOS visual effects and editing software for the film industry.

Software Engineer

Hired as one of the first engineers at the startup stage, on a product development effort.

- Responsible for the development of an editing and visual effects software product targeted to small film productions using a mix of C, C++, Objective-C, and UI frameworks (e.g. AppKit, Qt).
- Architected and led development of the non-linear editing software and a multi-threaded 3D and image processing engine using OpenGL and GLSL.
- Successfully lobbied for and implemented continuous integration processes and tooling that included macOS Server, clang-format, Xcode static analyser, unit and UI testing with Xcode testing tools, and a bash script to export builds for QA testing.

Prior experience includes two internships in France focused on video surveillance devices and Advanced Driving Assistance Systems.

PERSONAL PROJECTS

- **Interpreter** - Wrote an interpreter in Python for a toy scripting language that supports functions, classes, inheritance, and dynamic typing.
- **Compiler** - Built a compiler in Python for a statically typed scripting language that supports functions, with the ability to generate code for LLVM or WebAssembly.
- **Ray Tracer** - Wrote a Ray Tracer in C++ with multithreading support to explore different approaches to software development and learn physically-based rendering, colour science, and 3D geometry.
- **BitTorrent Client** - A BitTorrent Client written in Python, with support for peer discovery, piece selection algorithms and concurrent connections. Exploration of networking protocol implementation and high-performance I/O.

EDUCATION

- **"Diplome d'Ingenieur" (MS Electrical Engineering equivalent)**, Grenoble Institute of Technology - Grenoble, France
- **BS, Engineering Sciences**, Grenoble Institute of Technology - Grenoble, France

SKILLS

C++, C, Objective-C, Python, TypeScript, JavaScript, SQL, macOS, Linux, Unix, Windows, git, svn, Perforce, clang, Make, CMake, FastBuild, CI/CD, Jenkins, Qt—bilingual in French and English.