Luis Quesada

Senior Engineering Manager

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SUMMARY

Engineering leader with expertise in defining and executing technical strategy, with a proven track record of building top-performing organizations. Led 70+ engineers to revamp five production areas across 50+ products, boosting engineering velocity and system reliability, performance, efficiency, and scalability.

SKILLS

Systems: Architecture, performance, automation, monitoring, load balancing, capacity, and data integrity
Artificial Intelligence: Infrastructure and solutions, applied Generative Multi-modal Models
Computer Languages: Go, Java, Python, JavaScript, TypeScript, PHP, Bash shell script, and SQL
People: Organization design, career development, team health, coaching, presentation, and negotiation
Languages: Spanish (Native), English (C2), German (B2), Swiss German (B1), and Esperanto (B1)

EXPERIENCE

Google, 2014 – currently

YouTube Infrastructure, Software Engineering — Senior Engineering Manager (L7)
- Improved the performance of high-throughput pipelines by 1000x. **Award**: Performance Excellence
- Built a scalable platform that integrates 100+ backends and Large Language Models, enabling rapid development of complex insights. **Awards**: Engineering + Feature + Feature Excellence

Cloud Artificial Intelligence, Site Reliability Engineering — Senior Engineering Manager (L5→L7)
- Revamped capacity, monitoring, rollouts, data integrity, and frameworks across the entire developer organization, garnering top-down support, influencing the work of 70+ engineers, and leading the delivery, which improved the velocity, efficiency, and reliability of tens of products and 1K+ engineers. **Awards**: Cloud + Core + Google Tech Impact, Perfy, Tech Debt Busters, Tech Debt Busters
- Led the productionization of three large Cloud Artificial Intelligence products across reliability, scalability, security, and process requirements, and enabled their launch.

Datacenter Software, Site Reliability Engineering — Technical Leader/Engineering Manager (L5)
- Sped up a project to revamp critical datacenter systems and landed it one year ahead of time.
- Troubleshot and addressed incidents with company-wide impact as part of on-call responsibilities.

Apps Storage, Site Reliability Engineering — Technical Leader (L4→L5)
- Developed capacity models for products with 1B+ users and delivered significant resource savings.
- Responded to user-facing outages and performed complex operations without downtime while on-call.
- Led the company-wide migration to a new storage service. **Award**: Feats of Engineering

University of Granada, 2010 – 2014

Department of Computer Science and Artificial Intelligence — Research Fellow
- Researched compilers and directed a Thesis on music prototyping languages. **Award**: Best Thesis.
- Researched 3-degree-of-freedom motion tracking techniques with a single low-budget camera.

STUDIES

University of Granada, 2004 – 2010

Master in Research, Soft Computing and Intelligent Systems. GPA 9.3/10.
Bachelor of Science, Information Systems Engineering. GPA 8.7/10. **Award**: 1st in Class.
Master of Science, Computer Science. GPA 9.2/10. **Awards**: 1st in Class, National Award, Best Thesis.
Bachelor of Science, Computer Systems Engineering. GPA 8.7/10. **Award**: 1st in Class.

INTERESTS

Generative Artificial Intelligence
- Professional Certificate on Generative Artificial Intelligence Engineering — IBM, 2024
- Professional Certificate on Artificial Intelligence Development — IBM, 2024
- Developed ComfyUI nodes for inpainting, gathered 220K+ downloads and 750 GitHub stars.
- Fine-tuned models by training LoRA adapters with a dataset of pictures of myself.

Distributed Systems
- Published a tech talk and an article on capacity management.
- Published a tech talk on Google's production environment.
- Published a tech talk on the Paxos algorithm.

Cybersecurity
- Professional Certificate on Cybersecurity — Google, 2024
- Professional Certificate on Security — University of Salamanca, 2011

Computer Vision
- Designed and developed a 3D motion tracking solution that works on a single camera.
- Proposed hardware for voxel-based 3D object modeling.

Programming Languages
- Designed and developed lexical analyzers, parsers, and a model compiler with ambiguity support.
- Designed and developed parallel finite state machines for fast ambiguity-supporting lexical analysis.
- Designed a domain-specific language for music prototyping.
- Decompiled a Java splicer and extended it with a command-line interface.
- Developed a Java bytecode similarity detector and a manifest-based run-time subclass finder.

People Management
- Co-authored a book chapter on managing team overload.

User Experience
- Professional Certificate on User Experience Design — Google, 2024
- Designed alternate user interface designs for amateur radio transceivers.

Video Game Development
- Developed a web-based multiplayer videogame in PHP+MySQL, with 10K+ players in the 2000s.
- Developed a shooter videogame in C for the Game Boy Advance console.
- Developed a rogue-like videogame in JavaScript.
- Developed a physics engine and 3D world videogame prototype in Java.
- Developed a dungeon videogame prototype in Java with custom physics and graphic engines.
- Developed a dungeon videogame prototype in Go with custom physics and inventory engines.

Amateur Radio
- Harmonized Amateur Radio Exam Certificate — Ofcom, 2025
- Developed a practice Morse code keyer application.
- Copied a live signal from an astronaut in the International Space Station.

Literature
- Authored and illustrated Spanish books for children leveraging generative artificial intelligence.

Music
- Modern Musician Specialization — Berklee College of Music, 2014
- Grade 5 Music Theory — The Associated Board of the Royal Schools of Music, 2013
- Grade 4 Singing — The Associated Board of the Royal Schools of Music, 2013
- Composed, recoded, and produced several indie rock, synthesizer, and piano albums.
- Produced several alternative rock albums leveraging generative artificial intelligence.