

ALEJANDRO QUIJADA LEYTON

MSC COMPUTER SCIENCE

SUMMARY

I am a **Full-Stack** Developer and **Game Developer** with over **nine years of experience**, specializing in gameplay systems using **Unity** and **C#**. I have extensive experience collaborating with stakeholders and cross-functional teams to develop and optimize complex applications and game mechanics. With a focus on building scalable and high-performance systems, I've contributed to **successful game projects** and implemented core gameplay features and networking solutions. Proficient in Agile methodologies, I aim to deliver **high-quality code** and foster **strong development culture** through code reviews and collaborative processes.

WORK EXPERIENCE

- **Senior Backend Engineer**, Rvere, Apr 2025 to Current
 - Contributed to performance and scalability optimizations in **AI-powered Web Applications**.
 - Led **development** of scalable **Optimization Pipelines** leveraging FAISS for semantic search and **Gemini** models for **LLM**-driven file transformations, with robust test infrastructure for automated enhancement workflows.
 - Built backend systems with **CI/CD** pipelines on **Google Cloud Platform**, using **Python** and **React** for seamless deployment and integration.
- **Full-Stack Developer, University of Oxford, Medical Science Division**, Jul 2024 to April 2025
 - Developed and maintained the Multi-Dimensional Viewer (**MDV**), a cutting-edge tool for analyzing, annotating, and sharing multi-dimensional biological data.
 - Designed and implemented **full-stack** architecture using **React**, **TypeScript**, **Node.js**, **Python**, **Flask**, **Apache Kafka**, and **PostgreSQL** to streamline data integration, visualization, and analysis.
 - Worked with the Stephen Taylor **Medical Science Division** to develop computational methods for biological dataset analysis.
 - Improved application **performance** and **user experience** for researchers across the division by optimizing data handling and **visualization processes**.
- **Full-Stack Developer and UX Designer, UCL Institute of Cognitive Neuroscience**, Jan 2020 – Aug 2023
 - Contributed as a **Full-Stack** and **Game** Developer on **Alex Leff's team** to develop web-based **therapeutic applications**, including **ReadRight**, **Eye-Search**, and **iTalk** for aphasic stroke patients.
 - Led the redesign of the Eye-Search application, a **serious game** incorporating **gamification** techniques to improve user adherence and enhance overall user experience (UX).
 - Developed applications using **Python**, **Unity**, **WebGL**, **Node.js**, **MySQL**, and **AWS** services (**EC2**, **DynamoDB**, **Lambda**, **S3**), optimizing performance and scalability.
 - Conducted research and data analysis using **SAS** and **R** to study user behavior and outcomes, informing key design decisions.
- **Software Engineer, Gamaga - Kongregate**, Apr 2023 – Aug 2023
 - Developed and optimized gameplay systems for the MMO RPG Game **Bit Heroes Quest** using **Unity** and **C#** and integrated **backend** systems using **Java**, **PHP**, and **AWS** services
 - Worked closely with designers, artists, and QA to ensure smooth implementation of game features, delivering high-quality, bug-free code.
 - Conducted code reviews and optimized development workflows using Git and **CI/CD** pipelines.
- **Algorithms and Data Structures Computer Science Assistant, University of Chile**, 2024 – Present

RELEVANT SKILLS

Programming Languages:

C, C#, Python, Java, C++, Ruby, JavaScript, Assembler

Frameworks:

Unity, Godot, Django, Apache, Ruby on Rails, Node.js, Flask, R, Vue, SaS

Libraries and Technologies:

PyTorch, NumPy, Scikit-learn, Pandas, TensorFlow, Hadoop, Spark, Cassandra, MongoDB, Tableau

WORK AREAS

- *Human-Computer Interaction*
- *Full-Stack Development*
- *Data Science*
- *Game Design*
- *Game Development*
- *Gamification*
- *Big Data*
- *Academic Research*
- *Statistical Studies*
- *UX Research*
- *Machine Learning*
- *Research & Development*

LANGUAGES

- Spanish (native)
- English (advanced)

EDUCATION

Master in Game Design and Development, European University of Madrid – 2026-2027

Master of Science, Computer Science, University of Chile – Graduated with Highest Honors, 2022

Bachelor of Engineering, Civil Computer Science, University of Chile – Graduated with Highest Honors, 2018

ADDITIONAL WORK

- *Head Teacher for Algorithms and Data Structures*, University of Chile, 2024
- *Human-Computer Interaction Researcher*, University of Chile, 2022-2024

CONTACT

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