



To whom it may concern:

I am very happy to recommend Ignacio Balasch for admission to your Master's program. I have known Ignacio in two capacities: as his professor in Research Operations at Comillas ICAI, and later as one of the advisors for his undergraduate thesis on machine learning applied to healthcare analytics. Across both stages, he consistently demonstrated the rare combination of technical curiosity, disciplined thinking, and intellectual independence that I associate with truly promising students.

In my course, Ignacio stood out not only for his strong quantitative performance but also for his instinct to understand systems end-to-end. He approached optimization problems, data structures, and algorithmic reasoning with an unusual maturity—always looking for the underlying logic, not just the surface-level solution. His questions were wide-ranging, rigorous, and often revealed a deeper sense of how analytical tools interact with real-world constraints.

During his thesis work, Ignacio took full ownership of a complex problem: designing a scalable ML/BI environment for healthcare cost prediction. Instead of limiting himself to the academic requirements, he built an end-to-end architecture that included data preprocessing pipelines, clustering frameworks, supervised learning models, and a fully documented reproducible workflow. What impressed me most was his ability to turn messy business data into a clean analytical system—an ability that is far more relevant than simply applying algorithms.

Ignacio also showed uncommon perseverance, especially when facing a lack of precedent or clear guidance. He worked independently, sought feedback strategically, and iterated until his models were both accurate and interpretable. In my experience, this is exactly the profile of a student who thrives in applied, entrepreneurial, and interdisciplinary environments.

Beyond academics, Ignacio is thoughtful, reflective, and internationally minded. His background across Spain and the United States gives him a natural ease in multicultural settings, and his professional internships (AI startup in Brussels, BI at Cigna, and now Amazon) show a trajectory that is both ambitious and grounded.

I fully support his application to your program. Ignacio is one of the most self-directed and intellectually engaged students I have taught in recent years, and I am confident he will contribute meaningfully to your academic community.

Sincerely,

Sara Lumbreiras