

**Principal Researcher: Sergio Nassarre - Universitat Rovira i Virgili**

**Title:** Data science of judicial decisions for evidence-based housing policies in Spain (DaSiHo).

**Main purpose of the project:** The project aims to trace the patterns of legal reasoning inspiring decisions that go on to become cornerstones of jurisprudence, and that may even lead to legislative changes. We will also seek to quantify the desired and undesired consequences of such decisions, and we commit to transfer our results to policymakers and judicial bodies.

**Design/methodology/approach:** We hypothesize that the patterns of legal reasoning can be uncovered and traced from the analysis of the citations among decisions, and of citations of legal articles by decisions. We also hypothesize that, by understanding these citation patterns, we will be able to identify cornerstone decisions, law changes, and other key events in the field of housing leading to systemic change and to distinct, measurable social impacts.

**Potential results:** 1. To identify judicial decisions that have a disproportionate social impact, or cause relevant trend changes in following courts decisions or even lead to legislative changes, because of their disruptiveness and innovativeness in the field of housing. 2. to identify judicial decisions that result from the social pressure (“robinprudence”). 3. To develop predictive models for abrupt transitions in judicial dynamics. 4. To evaluate gender and geographical inequities in judicial housing-related decisions. 5. To evaluate the effect of disruptiveness and innovation in the professional career of judges.

**Social relevance of the research:** The project will systematically analyze 26,000 judicial decisions related to housing matters using artificial intelligence, to unveil jurisprudential trends and innovations as a reaction to social movements, international courts’ sentences or legislative changes or as a precedent for those, taking into account geographical, temporal and gender perspectives. Ultimately, predictive models will be developed.

**Originality/value of the project:** DaSiHo aims to combine existing international research on housing in law and the social sciences, with data science approaches. The data science perspective will allow us to scrutinize systematically and quantitatively a large body of judicial decisions, focusing on the citations among decisions, as well as the citations of law articles by decisions.