# ABSTRACT

**Thesis title:**

The problem of perception of architecture in virtual space

**Abstract:**

The architectural design process has undergone many dynamic changes in the past several decades; improved drafting hardware, the introduction of software based drafting, computer generated imagery of designs, introduction of virtual environments and virtual design studios. With the evolution of computer aided architectural design, the process of design and creation began becoming more user friendly, more intuitive and easier to understand by those of little to no architectural design education thus end user content development began emerging into the limelight via popular online virtual reality social platforms. This thesis deals with the revolution of computer aided architectural design among virtual online societies and their design approach as a reflection of skill and background knowledge. The goal is to develop knowledge about the specificity of design trends and technicalities of virtual architecture based on online virtual reality social platforms, especially when taken into account their populace characteristics and the direction of evolution architectural design is taking place there. Having achieved those goals, it should be noted that the aims of this thesis are to provide a more in depth understanding of the preferences of online societies as well as the differentiating ergonomics and rules for architectural design for the virtual world, and to further define the problems of the mentioned virtual worlds in the context of architectural form and function. Works presented in this thesis were based on 1) analysis of existing architectural designs in the most popular virtual online social platforms, 2) analysis of hardware and software solutions for generating and hosting virtual reality architecture, 3) analysis and reevaluation of existing research on virtual reality, computer aided architectural design and virtual reality architecture, and lastly 4) confrontation of achieved results with the vector of evolution for future reference. The results showed that architectural design for virtual reality online societies is governed by a unique set of rules that apply to a wide range of alternative software solutions for online living spaces. The studies pointed out a) the problematic relationship between user owned hardware and architectural preferences, b) the abrupt nature of user generated architectural design, c) hardware associated limitation for further development of virtual architectural perception. Architectural design for virtual reality applications is heavily dependent on current trends and

hardware capabilities of the focus group, but at the same time is shaped by the same community in nonlinear directions of evolution, due to the short lived nature of the designers and the lack of experience and context for design methodology.