

Part-Time and Undergraduate Research Position

SAFAS: Structure and Form Analysis System

(<http://legacy.caus.vt.edu/setareh/archresearch/>)

The objective of the work related to the Structure and Form Analysis System (SAFAS) is to provide an educational tool for architecture students, engineering students, architects, engineers, and anyone interested in built-environments. SAFAS is designed to help individuals better understand the relationships between structure and form through an interactive web-based system.

This module consists of an interactive computer modeling tool that helps the user better comprehend the relationship between structure and form. This module allows the user to engage in an experiential approach in which he or she can: create or import a computer model of a spatial structure, define the design parameters, modify the configuration and different aspects of the structure, and observe the effects on his or her design.

Specifically, you will be working on a range of topics from debugging, support, 3D interaction, education, and human-computer interaction. The languages used are Java, XML, and X3D (knowledge of Java must). Students will also have the opportunity to work with a VisBox interactive display, which allows users to interact with software in an immersive environment. (see www.visbox.com for more information)

The position pays \$9.00/hr and students will be expected to work around 10 hours a week (negotiable based on performance). Ideally, students will stay with the group for at least a semester, however, it is possible to stay for longer if there is a mutual interest in longterm collaboration.

A downloadable version of the software in question can be found at (http://legacy.caus.vt.edu/setareh/archresearch/Module_2/index.html).

Students interested can contact

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