Variable Adaptive Infills for 3D Printing Applications

PROJECT DESCRIPTION
In order to optimize the 3D printed parts’ internal infill structure to provide lightweight and high strength properties, software should be developed to provide the ability to customize the shape of the infill structure and to adopt variable filling technique. Most of the available software provides fixed shape fixed filling percentage through the printed parts. Therefore, this project is currently being undertaken to develop an open source platform for design, slicing and incorporation of different infills for a given input geometry in form of an STL that can be used and optimized in various 3D printing applications.

FACULTY-DEPARTMENT
Engineering - Mechanical

DESIRED FIELD OF (STUDENT) STUDY
Computer Science, Electrical Engineering, Software Engineering, Mechatronics

INTERNSHIP LOCATION
University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS
1

INTERNSHIP START DATE
January 2

INTERNSHIP END DATE
12 weeks from start date

ARE THE DATES FLEXIBLE?
Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)
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