THE BRL-CAD PROJECT

There are many ways to get involved with the BRL-CAD project. Like many open source projects, we have a community of contributors but it's not always clear to someone new how one can get involved.

So , ***what is the BRL-CAD project ?***

BRL-CAD is a [constructive solid geometry](http://en.wikipedia.org/wiki/Constructive_solid_geometry) (CSG) [solid modeling](http://en.wikipedia.org/wiki/Solid_modeling) [computer-aided design](http://en.wikipedia.org/wiki/Computer-aided_design) (CAD) system. It includes an interactive [geometry](http://en.wikipedia.org/wiki/Geometry) editor, [ray tracing](http://en.wikipedia.org/wiki/Ray_tracing_%28graphics%29) support for [graphics rendering](http://en.wikipedia.org/wiki/Rendering_%28computer_graphics%29) and geometric analysis, [computer network](http://en.wikipedia.org/wiki/Computer_network) distributed [frame buffer](http://en.wikipedia.org/wiki/Framebuffer) support, scripting, image-processing and signal-processing tools.

Now… can ***I*** really contribute to the BRL-CAD project ?

Anyone can contribute to BRL-CAD! The project involves a wide range of activities, not just programming. Although BRL-CAD can be used for a variety of engineering and graphics applications, the package's primary purpose continues to be the support of ballistic and electromagnetic analyses. BRL-CAD is basically a collection of libraries, tools, and utilities that work together to create, raytrace, and interrogate geometry and manipulate files and data. In contrast to many other 3D modelling applications, BRL-CAD uses CSG rather than [boundary representation](http://en.wikipedia.org/wiki/Boundary_representation).This means BRL-CAD can "study physical phenomena such as ballistic penetration and thermal, radiative, neutron, and other types of transport

And..***how*** do I contribute ?

With BRL-CAD being a part of the open source community since 2004, contributors from all over the world are able to enhance the features and functions of the package in many different ways. In return, these contributors have had a unique opportunity to:

Join a team of passionate and talented contributors who share the common values of open source development. Open source emphasizes free redistribution; openly available source code; full, open participation; and nondescrimination against individuals, groups, technologies, or fields of interest. (To learn more, see [http://opensource.org](http://opensource.org/).)

Drive needed improvements in the open source software community's support for solid modeling and CAD software capabilities.

Experiment with new and state-of-the-art algorithms and ideas within the context of a fully open CAD system that is in production use and has an established user community.

Become a better developer. Whether you're a newbie or a seasoned developer with decades of experience, you can always work on a BRL-CAD project that is catered toward improving your abilities.

Become part of a legacy. Participate in a robust and historically significant open source project that goes all the way back to the days of the DEC PDP-11/70 and VAX-11/780.

Gain practical experience working on a real-world, large-scale software project