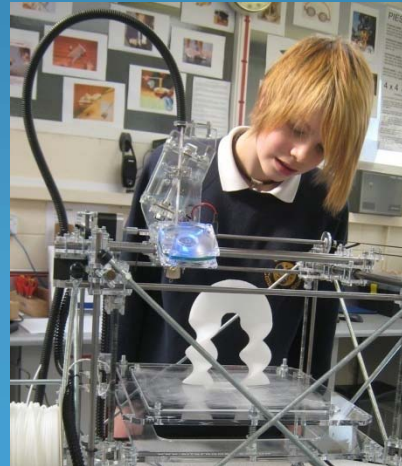
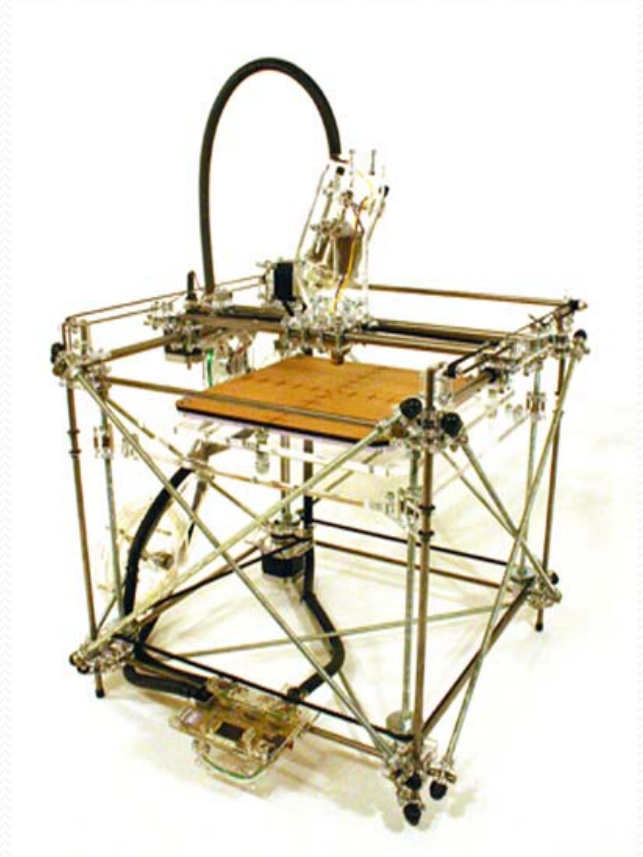


RapMan and Open Source Projects



Origins of RapMan

- RapMan is a 3D printer...
Yes it can actually make 3D objects out of a variety of plastic materials (polymers)
- RapMan is made by Mr Ian Adkins an engineer from Clevedon near Bristol, UK.
- The design for Rapman is a development from the RepRap project... An open source project.



Open source



- What is “Open Source”?
- Generically, *open source* refers to programs, projects or designs in which are available to the general public for use and/or modification from its original design free of charge.
- Open source projects are typically created as a collaborative effort in which programmers/designers improve upon the code/product and share the changes within the community.
- Open source software and products in everyday use include the software for Wikipedia, Open Office software, Firefox, and of course RapMan and the software that it uses.

Open source licence

- **To be regarded as open source the design needs to conform to some rules. Basically these are...**
- **Free Redistribution**
The designer/programmer of the product should not restrict anyone from giving away or redistributing the software ...
For free
- **Source Code/Design**
The design/program must include source code, or drawings and must allow them to be freely distributed
- **Derived Works**
Modifications and derived works, must be allowed and these should be distributed under the same terms as the license of the original software/product.
- **Integrity of The Author's Source Code**
If a design is distributed that is a modification of **someone else's work** it should **acknowledge the original designer and** carry a different name or version number from the original
- **No Discrimination Against Persons or Groups**
The design must not discriminate against any person or group of persons.
- **No Discrimination Against Fields of Endeavour**
The design must not restrict anyone from making use of the program in a specific field of endeavour.
- **The Software/Product Must Not Restrict Other Software/Products**
The software/design must not restrict any other designs.
- **The Software/Product Must Be Technology-Neutral**

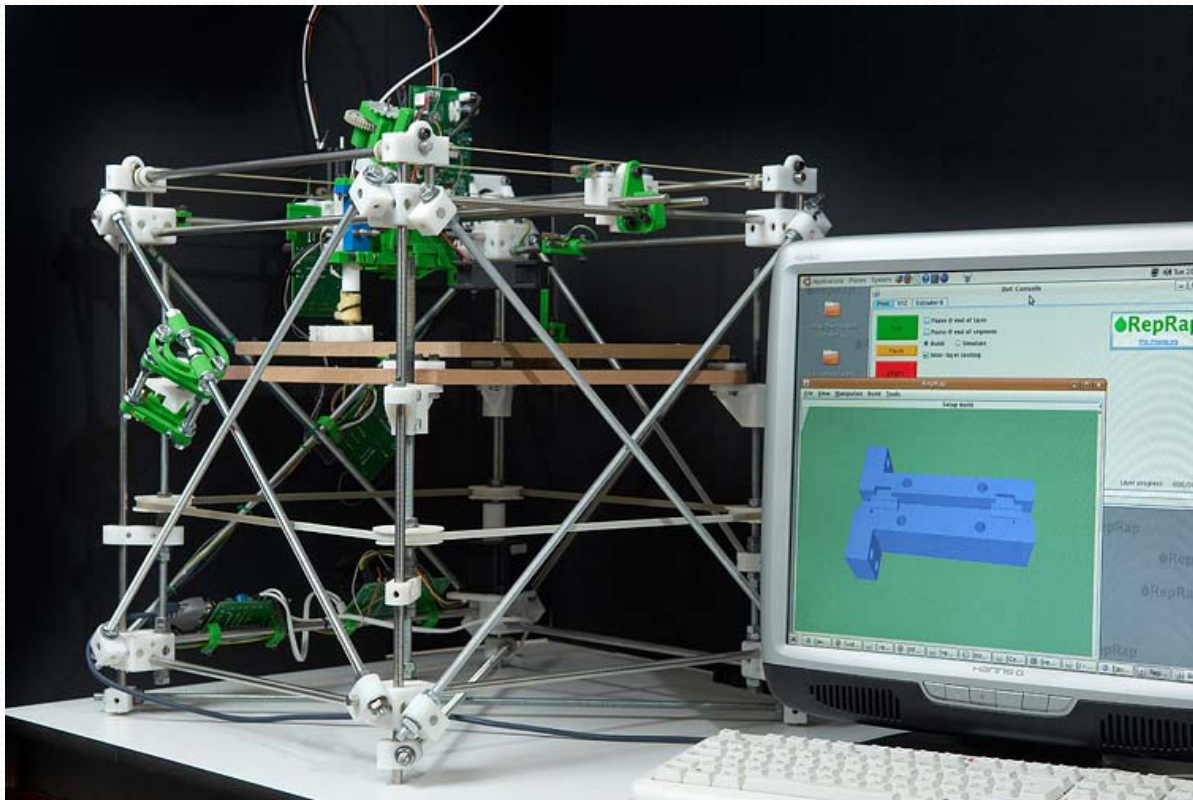
RapMan and RepRap



- What is Rapman and RepRap?
- RapMan is a design that has been derived from the RepRap project.
- RepRap is short for Replicating Rapid-Prototyper.
- The RepRap project was set up in 2004 by Dr Adrian Bowyer at Bath University (UK) to design a practical self-copying 3D printer - a self-replicating machine. This 3D printer builds the parts up in layers of plastic.
- Yes, these machines can make a lot of their own parts!
- Being “open source” means that anyone can share the design of these machines and their software. All of this can be downloaded from the internet.

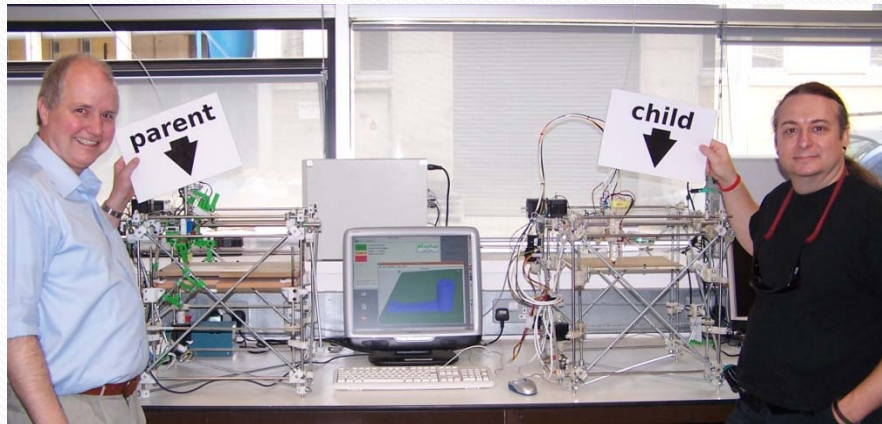
RepRap Project

- The “Darwin” design of RepRap machine that anyone can make. (You can see the similarities with RapMan.)



Self Replicating

- Not counting nuts and bolts RepRap can make 60% of its parts; the other parts are designed to be cheaply available everywhere.
- The primary goal of the RepRap project is to create and to give away a “makes-useful-stuff machine” that, among other things, allows its owner cheaply and easily to make another such machine for someone else.
- Adrian Bowyer (left) and Vik Olliver (right) can be seen here with the first ever “parent” and “child” machines.... The RepRap on the left made the one on the right!



More information

- For more information on RepRap visit <http://reprap.org>
- For more information about all things to do with Rapman visit the Bits from Bytes Website

Website <http://bitsfrombytes.com>

Forum <http://www.bitsfrombytes.com/fora/user/index.php>

Wiki <http://www.bitsfrombytes.com/wiki>