# EXHIBIT 9

# Hacker (programmer subculture)

From Wikipedia, the free encyclopedia

In one of several meanings of the word in computing, a **hacker** is a member of the computer programmer subculture originated in the 1960s in the United States academia, in particular around the Massachusetts Institute of Technology (MIT)'s Tech Model Railroad Club (TMRC) and MIT Artificial Intelligence Laboratory. Nowadays, this subculture is mainly associated with the free software movement.

Hackers follow a spirit of creative playfulness and anti-authoritarianism, and sometimes use this term to refer to people applying the same attitude to other fields.

## Contents



## Definition

The Jargon File, a compendium of hacker slang, defines *hacker* as "A person who enjoys exploring the details of programmable systems and stretching their capabilities, as opposed to most users, who prefer to learn only the minimum necessary." [1] The Request for Comments (RFC) 1392, the Internet Users' Glossary, amplifies this meaning as "A person who delights in having an intimate understanding of the internal workings of a system, computers and computer networks in particular." [2] These hackers are disappointed (see definition controversy) by the mass media and mainstream public's usage of the word *hacker* to refer to security breakers, calling them "crackers" instead.

The difference between hackers and crackers, according to them, is that where hackers use their skills and knowledge to learn more about how systems and networks work, crackers will use the same skills to author harmful software (like viruses, trojans, etc.) and illegally infiltrate secure systems with the intention of doing harm to the system.[*citation needed*] This subculture of hackers doesn't participate in these activities and generally frowns upon them.

Many find this rewording a band-aid on the problem of social acceptance and recognition, as such 2600 Magazine's ethos is to instead concentrate on educating people about the field and related topics rather than disassociation.

## History

Before communications between computers and computer users was as networked as it is now, there were multiple independent and parallel hacker subcultures, often unaware or only partially aware of each

others' existence. All of these had certain important traits in common:

- Creating software and sharing it with each other
- Placing a high value on freedom of inquiry; hostility to secrecy
- Information-sharing as both an ideal and a practical strategy
- Upholding the right to fork
- Emphasis on rationality
- Distaste for authority
- Playful cleverness, taking the serious humorously and their humor seriously

These sorts of subcultures were commonly found at academic settings such as college campuses. The MIT Artificial Intelligence Laboratory, the University of California, Berkeley and Carnegie Mellon University were particularly well-known hotbeds of early hacker culture. They evolved in parallel, and largely unconsciously, until the Internet, where a legendary PDP-10 machine at MIT, called AI, that was running ITS, provided an early meeting point of the hacker community. This and other developments such as the rise of the free software movement drew together a critically large population and encouraged the spread of a conscious, common, and systematic ethos. Symptomatic of this evolution were an increasing adoption of common slang and a shared view of history, similar to the way in which other occupational groups have professionalized themselves but without the formal credentialing process characteristic of most professional groups.

Over time, the academic hacker subculture has tended to become more conscious, more cohesive, and better organized. The most important consciousness-raising moments have included the composition of the first Jargon File in 1973, the promulgation of the GNU Manifesto in 1985, and the publication of *The Cathedral and the Bazaar* in 1997. Correlated with this has been the gradual election of a set of shared culture heroes: Bill Joy, Donald Knuth, Dennis Ritchie, Alan Kay, Ken Thompson, Richard M. Stallman, Linus Torvalds, Larry Wall, and Guido Van Rossum, among others.

The concentration of academic hacker subculture has paralleled and partly been driven by the commoditization of computer and networking technology, and has in turn accelerated that process. In 1975, hackerdom was scattered across several different families of operating systems and disparate networks; today it is largely a Unix and TCP/IP phenomenon, and is concentrated around various operating systems based on free software and open-source software development.

# Ethics and principles

Many of the values and tenets of the free and open source software movement stem from the hacker ethics that originated at MIT and at the Homebrew Computer Club. The so-called Hacker Ethics were chronicled by Steven Levy in Hackers: Heroes of the Computer Revolution and in other texts.

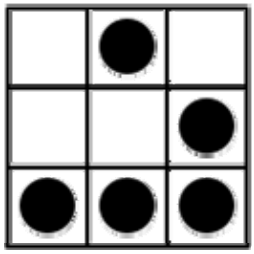
Hacker ethics are concerned primarily with sharing, openness, collaboration, and engaging in the Hands-On Imperative[3].

# Artifacts and customs

The academic hacker subculture is defined by shared work and play focused around central artifacts. Some of these artifacts are very large; the Internet, the World Wide Web, the GNU Project, and the Linux kernel are all hacker creations, works of which the subculture considers itself primary custodian.

The academic hacker subculture has developed a rich range of symbols that serve as recognition symbols and reinforce its group identity. GNU's Gnu, the BSD Daemon, Tux, the Linux penguin, and the Perl Camel stand out as examples. The use of the glider structure from Conway's Game of Life as a general Hacker Emblem has been proposed by Eric S. Raymond.

The academic hacker subculture has an annual ceremonial day—April Fool's. There is a long tradition of perpetrating elaborate jokes, hoaxes, pranks and fake websites on this date, which includes the publication of the annual joke RFC.



The Glider, proposed as an emblem of the "hacker community" by Eric S. Raymond.

## Documents

The Jargon File has had a special role in acculturating hackers since its origins in the early 1970s. Many textbooks and some literary works shaped the academic hacker subculture; among the most influential are:

- *Hackers: Heroes of the Computer Revolution*, by Steven Levy
- *Gödel, Escher, Bach*, by Douglas Hofstadter
- *The Art of Computer Programming* (TAOCP), by Donald Knuth
- *The Mythical Man-Month*, by Brooks
- *Compilers: Principles, Techniques, and Tools* ("the Dragon Book"), by Aho, Sethi, and Ullman
- *Structure and Interpretation of Computer Programs* (SICP), by Abelson and Sussman
- *The C Programming Language* (K&R), by Kernighan and Ritchie
- *The Hitchhiker's Guide to the Galaxy*, by Douglas Adams
- *The Tao of Programming*, by Geoffrey James
- The *Illuminatus!* Trilogy, by Robert Shea and Robert Anton Wilson
- *Principia Discordia*, by Greg Hill and Kerry Thornley
- *The Soul of a New Machine*, by Tracy Kidder
- *The Cuckoo's Egg*, by Cliff Stoll
- *The Unix System*, by Stephen R. Bourne
- *Hackers & Painters*, by Paul Graham
- *The Cathedral and the Bazaar*, by Eric S. Raymond
- The essays of Richard M. Stallman (many published in *Free Software, Free Society: Select Essays of Richard M. Stallman*)

## Use outside of computing

While the word *hacker* to refer to someone who enjoys playful cleverness is most often applied to computer programmers, it is sometimes used for people who apply the same attitude to other fields.[4] For example, Richard Stallman describes the silent composition *4'33"* by John Cage and the 14th century palindromic three-part piece "Ma Fin Est Mon Commencement" by Guillaume de Machaut as hacks.[5] According to the Jargon File,[1] the word *hacker* was used in a similar sense among radio amateurs in the 1950s, even predating the software hacking community. More recent examples of this usage are:

- reality hacker, a person who explores the underlying reality of existence using any tools available;
- wetware hacker, someone who experiments with biological materials to advance knowledge;
- media hacker, someone who uses media in innovative ways.

## See also

- History of free software
- Hacker (computing)
- Hacker artist
- Hacker ethic
- Unix philosophy

## References


1. ^ ***a*** ***b*** Raymond, Eric, ed. (2003-12-29), "hacker", *Jargon File* (version 4.4.7 ed.), http://www.catb.org/jargon/html/H/hacker.html, retrieved 2008-03-02
2. ^ Internet Users' Glossary (Request for Comments 1392), January 1993
3. ^ Levy, S: "Hackers: Heroes of the Computer Revolution", Anchor Press/Doubleday, 1984. ISBN 0-385-19195-2
4. ^ Raymond, Eric (2008-01-08). "How To Become A Hacker". Thyrsus Enterprises. http://catb.org/~esr/faqs/hacker-howto.html. Retrieved 2008-03-16yaahh diigg!:L.
5. ^ Stallman, Richard (2002). "On Hacking". http://stallman.org/articles/on-hacking.html. Retrieved 2008-03-16.


## External links

- A Brief History of Hackerdom