

## **From Volunteer Computing to Volunteer Thinking and Beyond**

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Volunteer computing is a global grassroots movement to harness the computing power of privately owned PCs. Millions of people are donating spare time on their computers for scientific projects. Anyone with a computer and Internet can join. Today there are dozens of projects available to download. Some of these tackle global health-related issues such as drug design. Examples: ProteinFolding@home, FightAids@home, Compute Against Cancer, World Community Grid...

Africa@home is a partnership set up to promote the use of volunteer computing for pressing health and environmental issues facing developing world. The goal of AFRICA@home is to involve African students, scientists and institutions in the development and running of volunteer computing projects. The first application set up by AFRICA@home concerns computer simulations of malaria epidemiology. Other applications have been developed and volunteer computing servers have been installed in African Universities.

Volunteer Thinking is a form of volunteerism where volunteers provide scientific contributions (ex. data analysis) via the web. Examples: Galaxy Zoo: galaxy images classified by volunteers, Stardust@home, Herbaria@home, we call such projects Citizen CyberScience.

A Citizen Cyberscience Center is under development between CERN, University of Geneva and UNOSAT and proposes to build a sustainable framework to help researchers exploit citizen

cyberscience more widely in developing regions, to promote citizen cyberscience more broadly within the UN and other humanitarian organizations and to encourage the use of citizen cyberscience as an educational tool.

