

Log onto Facebook, contribute to scientific research

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(PhysOrg.com) -- Logging on to Facebook could soon be a way of contributing to important scientific research, as well as finding out what's going on in your world.

Researchers at Victoria University are developing a Facebook application that, once downloaded, enables people to donate the resources of their computer to scientific projects.

Known as cloud computing, this method is increasingly used for <u>scientific research</u> because individual computers or even small clusters cannot cope with the complex computation and large scale storage of data required.

Dr Kris Bubendorfer from Victoria's School of Engineering and Computer Science has been collaborating with researchers from the Karlsruhe Institute of Technology in Germany and Cardiff University in Wales on how information, hardware and services can be shared using the computing resources of a person's online network friends.

One of the best known examples of volunteer cloud computing is SETI@Home which was started in 1999 to analyse radio signals from space in the hope of detecting signs of intelligent life.

Dr Bubendorfer says integrating cloud architecture with a social network like Facebook has advantages over existing options, such as commercial clouds which some research teams use on a pay-as-you-go basis.



"Using commercial clouds can be very expensive and it's difficult for researchers to get funding to access public cloud time.

"While volunteer computing works well, it doesn't have the means to publicise projects so the numbers currently participating are limited. Facebook, on the other hand, has 500 million active users and places to profile new projects.

"If we can recruit even one per cent of current Facebook users to become volunteers, that will have a significant impact on resources available for research."

Dr Bubendorfer's collaborators in Germany are developing rewards and incentives that will encourage Facebook users to sign on for volunteer computing while the team in Cardiff is working on business models to support the initiative.

At Victoria, Master's students have been investigating how the volunteer computing model can be adapted for <u>Facebook</u> and an application is expected to be ready for release at the end of this year.

Another Victoria student under Dr Bubendorfer's supervision is working on a different strand of the research—how scientists can use social networks to team up and form virtual research environments.

"Social networks offer an easy and quick way for scientists to find each other and agree to share resources for the duration of a project."

Dr Bubendorfer says while it's early days, he is excited by what a social cloud can offer.

"One of the things that made the world wide web so popular is the way users can engage with it and this is a bit the same. You're not just buying



something, you are opting in to a process that is interactive and controlled by users.

"To an extent, this is democratisation of the cloud."

Provided by Victoria University

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