

**IGERT Inquirer
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Week of January 10, 2005**

Inquirer Statement

The *Inquirer* was originally designed as part of the WSU-IGERT Summer Internship program. This document's main purpose was to inform readers about policies and issues related to this summer project. Clearly, communication was vital to the development of an effort such as the WSU-IGERT Internship program. With the success of the *Inquirer*, it was decided that the format of the *Inquirer* would be changed to a monthly, year round component. Moreover, it was decided that the scope of this document would be changed to reflect the activity of the WSU-IGERT program in high performance computing and simulation in its entirety. Thereby, evolving into a resource that can be used by a larger audience.

With this in mind, the *Inquirer* will target text that introduces its readers to the highlights of some of the accomplishments of its members. It would also inform readers about the structure of WSU-IGERT. The *Inquirer* will look to become a feedback mechanism relative to policy, course work and most importantly, promoting the concept of "Interdisciplinary research."

Solicitation

Anyone who has "items of interest" to share with the rest of the group is encouraged to send a note to Doris King so that the information can be submitted or the issues can be addressed. We are especially looking to inform fellows about various activities such as additional seminars, workshops, and conferences that would enhance their research experience especially if a fellow is presenting at the conference.

The *Inquirer* looks to not only inform, but also to become a vehicle to be used by faculty, staff, associates, supporters and fellows to improve the overall program. Hence, we welcome any feedback that may arise from this text. All views will be evaluated and posted.

New Course for Winter 2005!!!

Name: High Performance Computing Programming and Applications

Course #: SCP 7300 – 001 (CRN 25784) and CSC 5991 – 001 (CRN 25782)

Time: Saturday 2:00 – 4:40pm in 313 State Hall

- Summary:** Modern high performance computing has been gradually evolving into amalgamation of symmetric multiple processors embedded within distributed interconnected systems. There are a variety of method that are current of emerging standards to program these systems, including OpenMP, MPI, and the emerging Grid standards (OGSI, WSRF). We will cover program development, optimization, and parallelization using these tools. This course is targeted at scientists and engineers who need to get the most performance out of their systems for their applications.
- Instructor:** Dr. Joseph Landman. Founder and CEO of Scalable Informatics LLC, with 15+ years of high performance computing experience in computationally intensive science.
- Content:** OpenMP, MPI, Cluster, and Grid programming for life sciences, engineering, and computationally intensive science.

Ethics in Computing

Wayne State University Policy 2001-2002 Policy-Making by the President Acceptable Use of Information Technology Resources

1.0 Purpose

This policy is designed to guide students, faculty and staff in the acceptable use of computer systems, networks, and other information technology resources at Wayne State University.

2.0 Guiding Principles

2.1 The University community is encouraged to make innovative and creative use of information technologies in support of educational, scholarly, and administrative purposes. Wayne State University supports access to information representing a multitude of views for the interest, information and enlightenment of students, faculty and staff. Consistent with this policy, Wayne State University supports the use of information technology resources in a manner that recognizes both the rights and the obligations of academic freedom.

2.2 Wayne State University recognizes the importance of copyright and other protections afforded to the creators of intellectual property. Users are responsible for making use of software and other information technology resources in accordance with copyright and licensing restrictions and applicable University policies. Using information technology resources in a manner violating these protections, or furthering the unauthorized use or sale of protected intellectual property, is prohibited.

2.3 Wayne State University cannot protect individuals against the receipt of potentially offensive material. Those who use electronic communications occasionally may receive material that they might find offensive. Those who make personal information available about themselves through the Internet or other electronic media may expose themselves to potential invasions of privacy.

2.4 Information technology resources are provided to support the University's scholarly, educational, and administrative activities. Information technology resources are limited, and should be used wisely and with consideration for the rights and needs of others.

For full article go to www.med.wayne.edu/msis/helpdesk/ethics.asp

Legal P2P networks gaining ground

By John Borland
Staff Writer, CNET News.com

While peer-to-peer piracy continues to grab the entertainment industry's attention, a few technology companies are gaining headwind, using almost identical means to distribute legal downloads.

After several years in the shadows, Red Swoosh--a company founded by veterans of Scour, one of the first file-swapping services Hollywood shut down--emerged Tuesday with the seeds of a healthy content distribution business. While prominent peer-to-peer companies such as Kontiki and Groove Networks have focused on business applications, Red Swoosh has kept its eyes on entertainment and consumers.

In part, that's why the company's CEO is now reaching out to the broad community of people using BitTorrent, an underground file-trading application using similar technology that has exploded in popularity among people distributing or downloading video and software programs.

Red Swoosh CEO Travis Kalanick said he wants to tap that energy. He's offering free use of Red Swoosh's content distribution services to noncommercial filmmakers, game developers or other publishers.

"I don't want to fight BitTorrent," Kalanick said. "I want to have a relationship with that community. That's not just about cutting a deal; you have give to that community."

The peer-to-peer technology world has been proceeding on two tracks almost since the emergence of Napster, despite similarities on the technological front. Underground networks like BitTorrent and Kazaa have flourished, while companies like Red Swoosh that have taken the copyright-friendly track are now just beginning to see their efforts bear fruit.

Red Swoosh and rival Kontiki, along with a handful of other companies, say peer-to-peer technology allows content distributors to pass off much of their distribution costs--largely in the form of Net bandwidth charges--to their customers. For companies distributing large files to many people, such as gaming or video publishers, that can be a huge benefit, they say.

As with more familiar networks, like the defunct Napster or Kazaa, people interested in specific files download them and store them on their hard drives. With Kontiki or Red Swoosh, they also download the peer-to-peer company's sharing application, which then lets other people interested in the same files download from them instead of from the original publisher.

Kontiki counts GameSpot, a game site News.com publisher CNET Networks owns, among its clients--though it now focuses more on internal corporate communications. Red Swoosh has signed GameSpot rival IGN Entertainment, as well as Net video site iFilm. Largely as a result of those two customers, the company's network has peaked at transmitting 7 terabytes of data in a single day, Kalanick said.

IGN Chief Technology Officer Ken Keller said Red Swoosh's services have saved the company considerable amounts of money, including about \$36,000 on the distribution of more than 18 terabytes of data last month.

Some analysts remain skeptical of peer-to-peer companies' ability to play a large role in entertainment distribution, however.

"Large companies I've talked to didn't seem to want to adopt it because (of) a lot of the uncertainties around it," said Lawrence Orans, a Gartner analyst. He noted that people uploading content could be violating some Internet service providers' terms of service or even exceeding monthly bandwidth limitations, in some cases.

Student Seminars Winter '05

The list of fellows will be presenting seminars in the months of January and February on the followings dates. See below.

DATE	PRESENTER
1/7/05	Nusrat Lubna – Recent Research
1/21/05	Nhi Pham – Recent Research
2/4/05	Cristina Piluso – Recent Research
2/18/05	Yugang Xiao – Recent Research

The seminars will be held on Fridays in 313 State Hall from 1:00P to 2:00P. If fellows would like to have the titles of their presentations added to this text please send them to Keith Williams at kbw@chemwayne.edu.

Acknowledgements

The Inquirer would like to acknowledge the contributions of one of WSU-IGERT's Research Technician, Darryl Gardner. Mr. Gardner's first association with WSU-IGERT was as an intern in the program's summer program in 2003. He went on the graduate from Wayne State in the Spring 2003 at the undergraduate level in Mathematics.

Darryl has been a vital component and has made significant contributions to the project's recruitment and retention committee. One of his duties has been as a contributor and an editor of this text.

In addition to duties with WSU-IGERT Mr. Gardner served as a Professional Technician within the Division of Community Education (DCE). Lastly, Darryl also served as a mathematics instructor with ISP.

Darryl is moving on to a full time position in DCE as an Extension Program Coordinator. We certainly wish him well as he moves forwards with the rewards and challenges associated with his new appointment. Of course, we are also looking forward to processing his application to WSU-IGERT to begin his graduate studies in Mathematics.

Inquirer Calendar

Retention/Recruitment meeting	January 5 th
Winter classes begin	January 10 th
WIGSCO meeting	January 12 th
Martin L. King Day (WSU closed)	January 17 th
Retention/Recruitment meeting	January 19 th

Next Month's issue

Next month, the Inquirer will present additional articles associated with ethics in technology. Also, articles will be presented by WIGSCO as the group looks to solicit replacement committee members and acknowledge those who served over the last year and are moving on. Of course, there will be profiles, local articles and other text of interest.