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## **EDUCATION**

Indiana University, Department of Computer Science, Bloomington, IN

**PhD (Expected 4/2006)**

**Dissertation:** Context-aware Telephony and Its Users: Methods to Improve the Accuracy of Mobile Device Interruptions

**M.S** 2004. GPA: 3.9

Indiana University, Department of Chemistry, Bloomington, IN

**M.S.** May 2001

**Dissertation:** Predicting Reservoir Geometry and Internal Characteristics: An Integrated Data and Modeling Approach

Birzeit University, Palestine

**B.S (Honors)** Physics July 1998

**Minor Computer Science**

## **AREAS OF INTEREST**

I aim to pursue further study on various aspects of Human-Computer Interaction, Ubiquitous and Mobile Computing, Context-Awareness, Interruptions, Social Computing, and Privacy. I am particularly interested in user acceptance of ubiquitous computing technologies, and how acceptance is affected by such issues as control, convenience, personal motivation and privacy. I also hope to discover new interaction paradigms between users and their cell phones to provide users with computing services other than voice communications and text messaging.

## **RELEVANT WORK EXPERIENCE**

**Research Assistant** for Prof. Kay Connelly at SURG Lab: 2003-current

Working on Automatic Device Configuration (ADC) which automatically changes the configuration of mobile devices depending on the social context. The purpose is to minimize inappropriate cellphone interruptions and to create more socially-aware cell phones. Part of the research is to develop a user study to examine the feasibility of the project and analyze the requirements. Another part is to investigate users' privacy preferences and concerns when using different types of context information for context-aware telephony.

**Research Assistant** for Prof. Beth Plale at DDE Lab: 05/2001-08-2002

Worked on developing a benchmark for evaluating the performance of different platforms for grid resource information managements. The work compared results obtained from three different platforms (relational database, XML database, and LDAP database). Tasks ranged from developing the benchmark, installing servers, writing queries, and analyzing performance.

### **Research Intern, Adaptive Technology Center at IUB: Summer 2002**

Tested and evaluated different computer software for students with disabilities. Part of the work was designing and conducting user studies as well as developing software training guides for students with visual and mobility impairments.

### **Research Assistant for Prof. Peter Ortoleva at LCG Lab: 08/1998-01/2000**

The **EOM** project, an earthquake modeling that is based on incremental stress rheology and rock texture dynamics. The model used state of the art scientific computing and visualization techniques to solve the highly dynamic equations and visualize the 3D results in real-time.

### **Summer Internship at Jefferson Lab, Newport News, VA, summer 1998.**

Developed computer applications which analyzed and visualized real-time and large-scale data generated from a high-energy particle accelerator.

## **TEACHING EXPERIENCE**

**Associate Instructor** for Department of Computer Science, Indiana University for Computer networks (graduate level), Operating Systems (senior undergraduate), Introduction to Programming (sophomore undergrad), Network Technology and Administration (non-major graduate), Introduction of Computers and Computing (freshman non-major). Responsibilities included leading laboratory discussions, designing and grading assignments and exams, and occasional classroom teaching.

### **Associate Instructor, Indiana University Chemistry Dept., 01/2000-12/2000**

**Calm** Project, a dynamic and interactive web-based educational system through which students evaluate their problem-solving skills. Responsibilities included design and implementation of an early version of the system, plus management and maintenance. URL: <http://calm.indiana.edu/>

## **PROJECTS**

- Conducted computational experiments to identify PageRank (used by search engines to determine the global importance of web pages) properties. The experiments examined the PageRank dependency on the net size, degree distribution, stability, and convergence using different numerical solvers.

- Managed a team of 4 graduate students to develop a 3D wireless location tracking infrastructure for the computer science building. The project used Wi-Fi signal strength measurements to build a radio map that was later used for location prediction of mobile users.
- Worked on 'NACHOS', an instructional Operating System as part of the Advanced Operating Systems course. The projects involved implementation of Multitasking, basic System Calls and Demand Paged Virtual memory. Involved extensive programming in C++. Fall 2001
- With a team, developed and implemented an inventory management software system for a client, as part of a year-long project for a Software Engineering class. The software includes web based catalog, real time inventory updates and order handling. The project involved extensive coding using ASP, MS-SQL and Visual Basic. Also prepared professional documentation in the form of user and programmer guides. Aug 2000-May 2001
- Built an Instant Messenger Service based on simple distributed event model. It uses a federated server model with LDAP directory services for registration and SOAP for messaging. Involved extensive programming in C++ and Java. Fall 2002

## **PUBLICATIONS**

### ***JOURNALS:***

- **Failure, Memory and Cyclic fault Movement**, K. Tuncay, A. Khalil, and P. Ortoleva June 2001; Bulletin of Seismological Society of America.

### ***CONFERENCES:***

- **Improving Cell Phone Awareness by Using Calendar Information.** Ashraf Khalil and Kay Connelly. In the Proceedings of International Conference on Human-Computer Interaction (INTERACT 2005), 2005. Rome, Italy.
- **Context-aware configuration: A study on improving cell phone awareness.** Ashraf Khalil and Kay Connelly. In the Proceedings of Fifth International and International Conference on Modeling and Using Context (CONTEXT 2005), 2005. Paris, France.
- **The Internet Hunt Revisited: Personal Information Accessible via the Web,** Kay H. Connelly, Tom Jagatic, Ashraf Khalil, Yong Liu, Katie A. Siek, and Sid Stamm. In the Proceedings of www@10, Paper, Terre Haute, IN, September 30-October 1, 2004.
- **A Comparative Study of Web Language Support for Mobile Web Browsers,** Katie A. Siek, Ashraf Khalil, Yong Liu, Nick Edmonds, and Kay H. Connelly. In the Proceedings of www@10, Paper, Terre Haute, IN, September 30-October 1, 2004.

### ***WORKSHOPS:***

- **Exploiting Social Environment to Increase Cellphone Awareness.** Ashraf Khalil and Kay Connelly. Workshop on Mobile Social Software. (CHI 2006).

- **Examining the Use of Surveys in Measuring Privacy in Ubiquitous Computing.** Ashraf Khalil and Kay Connelly. Workshop in Appropriate Methodology for Empirical Studies of Privacy, 2005, (INTERACT 05).
- **On Negotiating Automatic Device Configuration in Smart Environments,** Kay Connelly and Ashraf Khalil. In the Proceedings of PerWare 04 Workshop, Second IEEE International Conference on Pervasive Computing and Communications, Orlando, FL, March 14-17, 2004.
- **Towards Automatic Device Configuration in Smart Environments,** Kay Connelly and Ashraf Khalil. In the Proceedings of UbiSys Workshop 2003.

#### **TECHNICAL REPORTS:**

- **Experiments with PageRank Computation,** Ashraf Khalil and Yong Liu (Dec 2004). Technical Report.
- **Development of a Wireless Location System in Lindley Hall ,** R. Doshi, T. Jagatic, A. Khalil, S. Shirasuna, and P. Venkatakrisnan (Jan 2004). Technical Report.

#### **PAPERS UNDER REVIEW:**

- **Context-aware Telephony: Privacy Preferences and Sharing Patterns.** Ashraf Khalil and Kay Connelly. (*Submitted*)
- **Majority Takes All: A Collaborative Approach to Minimize Cellphone Interruptions.** Ashraf Khalil and Kay Connelly. (*Submitted*)
- **Do I Do What I Say?: A Survey's Ability to Predict Privacy Concerns in Pervasive Computing.** Yong Liu, Ashraf Khalil, Kay Connelly. (*Submitted*)
- **Evaluating the effect of Inaccuracy in Context-aware Applications.** Ashraf Khalil and Kay Connelly. Submitted

#### **PRESENTATIONS**

- **Towards Automatic Device Configuration in Smart Environments,** UbiSys Workshop, October 2003. Seattle, Washington.
- **On Negotiating Automatic Device Configuration in Smart Environments,** PerWare 04 Workshop, March 14, 2004. Orlando, FL.
- **Examining the Use of Surveys in Measuring Privacy in Ubiquitous Computing.** Workshop in Appropriate Methodology for Empirical Studies of Privacy, 2005, (INTERACT 05), September 12, 2005. Rome Italy
- **Improving Cell Phone Awareness by Using Calendar Information.** INTERACT 2005, September 17, 2005. Rome, Italy.
- **Context-aware Telephony and Its Users: Methods to Improve the Accuracy of Mobile Device Interruptions.** Invited Speaker for Motorola Company, November 21, 2005.

## **HONORS/AWARDS**

- Student representative for the Graduate Education Committee, Department of Computer Science, Indiana University. 2004.
- Student Recognition Award granted by Indiana University Information Technology Services (UIITS) for developing “Locate Me” system. 2003
- Volunteer award granted by Office of International Services, Indiana University, for helping incoming international students discover the university resources. 2001.
- Undergraduate Study Scholarship granted by Birzeit University, 1996, 97, 98.
- Excellent Academic Achievement Award granted by the College of Science, Birzeit University, Palestine, 1995, 1996, 1997, 1998.
- Highest GPA of the Regional High School Graduation Exam, 1994.

## **REFERENCES**

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