Rupa Patel, BS, MSI

The EHRVIZ Workshop Agenda has inspired me on a variety of levels. As an incoming student in University of Washington's Biomedical and Health Informatics PhD program, I have already demonstrated a strong interest in conducting research to improve clinical information systems interfaces to better accommodate workflow. In a summer position at Cielo Med Solutions, I am evaluating their lightweight clinical quality management system software using human-computer interaction methods and providing a new perspective on the product's information architecture. In addition, I have worked on an Information Visualization group project at University of Michigan School of Information's MSI program that addresses pain points for physicians in clinical note review prior to patient preoperative visits. Inspired by the timeline-based approach of the first incarnation of LifeLines, our group produced a futuristic visual mockup for this class. Work for this project and for an electronic medical record Evaluation project can be found at: http://www-personal.umich.edu/~rupatel/careverines/..

While at UM-SI, I also have been involved in research related to medical informatics. My thesis research is a qualitative study on patient handoffs and the problems of conforming to the Joint Commission mandate that these handoffs are standardized. In this study, I am comparing signout tools and procedures across clinical settings. The other major research project I have worked on is *Casepedia*, a Web 2.0 case repository platform that will allow medical professionals to publish, comment on, and classify authentic cases. Initiated by another student (Maureen Hanratty) and myself, our project proposal won a Grant Opportunities [Collaborative Spaces] award. The prototype we have built will allow physicians to browse or search for clinical scenarios of interest, as well as to reflect their vision on the cases and directly connect to contributing physicians or other patients. We envision eventually creating a rich, user-structured repository of medical narratives that provide the medical community a dynamic collaboration and educational channel.

My interdisciplinary academic and professional background has allowed me to understand and respond to socio-technical challenges in health informatics. As an undergraduate Symbolic Systems major at Stanford University, I concentrated in Human-Computer Interaction to understand principles behind making software usable. I was further introduced to a world of innovative research and theoretical foundations for web credibility when I worked part-time as a Lab Coordinator for BJ Fogg's Persuasive Technology Lab. Upon graduation in 2001, I spent nearly two years as a user interface Java programmer for Plumtree Software, an enterprise portal company. In my next position as an Oak Ridge Institute for Science and Education fellow at the Centers for Disease Control and Prevention (CDC), I designed and programmed public health applications for the Early Hearing Detection and Intervention team. At the CDC, I first became exposed to unique challenges that public health professionals faced in collecting accurate data to perform disease surveillance and measurement of public health program outcomes.

I personally believe that clinical systems have much to benefit from evidence-based design and evaluation research. I hope that as a workshop attendee, I would be able to connect the material to clinical software interface research that I plan to conduct for my PhD.