3:00 Siobhan Shier

Misconceptions and Perceptions that Keep Women from Computer Science and Proactive Strategies to Combat Them.

Abstract: This thesis talks about the misconceptions that pervade our society, how they are reinforced and propagated. It talks about the current strategies that are being put forth to combat the problem as well as offers a comprehensive four prong attack to combat, mitigate and help alleviate the misconception aided gender gap.

3:30 Frank Salim

A Globally-Accessible, Searchable Desktop

Abstract: This talk presents an application that exposes desktop file search to the web. It attempts to close the gap between the accessibility and organization of local files and documents on the Internet.

4:00 Michael Carter

Orbit: Scaling Asynchronous Bi-Directional Web Applications Out

Abstract: This paper uses an HTTP chat system as a case study to show the weaknesses of currently employed web frameworks in the area of asynchronous bi-directional events. Because bi-directional events require AJAX-style connection pooling, it is difficult to introduce a stateful web server backend that can stand up to the stress of thousands of idling connections. Furthermore, no current systems are straightforward to incorporate into existing applications and are wholly difficult to scale. We introduce Orbit, a standalone daemon to solve these problems. Rather than keep necessary logic within the process of the web server, Orbit accepts http request from browsers and communicates to the application with a simple readline protocol (OBP). Orbit is built around the idea of scaling out rather than up. Application designers can therefore work without worrying about complicated inter-process / inter-server communication or the financial and hardware constraints of scaling up.