Technology for Child Independent Mobility: Parent Perspectives

(Keynote Abstract)

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Keynote Abstract

Child independent mobility (CIM) refers to the freedom of children to move about their neighborhoods without direct adult supervision. It is widely accepted that CIM is essential to emotional, social, and physical well-being, yet CIM has dramatically declined. The emergence of the Internet of Things (IoT) and wearable computing devices makes it possible to instrument children in myriad ways. This talk reports on a recent survey of parent attitudes and perceptions around the use of technology worn or carried by children for the purpose of increasing their independent mobility. The talk will present results of the survey of more than 80 parents of elementary school students in the United States. The survey investigated aspects of CIM and technology ranging from parents’ attitudes toward independent mobility, children’s current mobility behaviors, current uses of technologies in children, and parents’ perceptions and preferences related to hardware and software associated with their children and their children’s mobility. The talk will also take a more speculative forward look and posit about future directions and opportunities for moving the needle in making children more independently mobile while maintaining their parent’s peace of mind.

Speaker’s Biography

Dr. Christine Julien completed her D.Sc. at Washington University in Saint Louis in 2004. She is currently a professor in the Department of Electrical and Computer Engineering at the University of Texas at Austin. She is a member of the Center for Advanced Research in Software Engineering and the director of the Mobile and Pervasive Computing Laboratory. Her research focuses on the intersection of software engineering and dynamic, unpredictable networked environments. Dr. Julien and her students develop models, abstractions, tools, and middleware whose goals are to ease the software engineering burden associated with building applications for pervasive and mobile computing environments.

Dr. Julien’s research has been supported by the National Science Foundation (NSF), the Air Force Office of Scientific Research (AFOSR), the Department of Defense, Freescale Semiconductors, Google, and Samsung. Her work has been recognized by an NSF CAREER award and an AFOSR Young Investigator Award, and the results have appeared in many peer reviewed journal and conference papers.