

**Faculty Name:**

Brian A. Smith

**Faculty Email:**

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**Lab:**

Computer-Enabled Abilities Laboratory (CEAL)

**Project Title:**

Helping Sighted Users Understand Blind and Visually Impaired Users' Interpretation of Visual Interfaces to Foster Better Communication Strategies

**Description:**

"The way that Blind and Visually Impaired (BVI) users interact with visual User Interfaces (UIs) is significantly different from how sighted users engage with the same UIs. BVI users often rely on screen readers, tactile displays, or a combination of assistive technologies to access a UI. However, this feedback is often not presented in the same way that sighted users access the visual version of the UI, thus creating a communication gap between BVI and sighted users when collaborating on a UI. While research has been done to understand and improve how BVI users perceive visual information, there needs to be more research exploring how visual information can be translated into easier-to-access paradigms for sighted users to communicate with BVI users.

This research is to implement a system that gives sighted users a better understanding of how BVI users interpret UIs through their various assistive technologies and to see how that can affect communication tactics that sighted users would use when collaborating with BVI users.

NOTE: Our advertised start and end dates are flexible."

**Location of Research:**

On-Site

**# of hrs/week:**

40

**Department/Program:**

Computer Science

**Eligibility:**

BS, First Year, BS, Second Year, BS, Third Year, BS, Fourth Year, MS

**To apply, please contact:**

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