

Undergraduate Summer Research Project

May-August (flexible schedule)

Motion Blur Prevention

Do you watch fast content on your display and it appears blurry? Do you play games with fast motion but you want to see the objects clearly? Motion blur occurs when objects move quickly relative to the background for both human and camera observations, and diminish image sharpness. Such motion blur even occurs when humans observe standard LCD/OLED digital displays. We have developed a method that alters the appearance of the imagery/video such that upon display it appears sharp, despite fast motion. The method is suitable for deployment on standard displays and does not need special hardware.

We have developed an initial prototype and seek to develop a web-friendly demonstration of this approach. Experience with the following is beneficial:

- Web page development (of any type)
- Good programming skills and self-driven nature
- Image processing and graphics knowledge is a significant plus
- Signal processing knowledge is a significant plus



Ideal-imagery

Image under motion blur

Result of our method

INTERESTED? Contact aliaga@cs.purdue.edu -- email subject: "Motion Blur"