Computer scientists at North Carolina State University jumped into a different kind of programming this week as we hosted a U.K. film crew from Lion Studios working on a new television series named The Link that began airing on the National Geographic Channel in May of 2012. Our episode, the third in the show's first season, is titled From Fireworks to Forensics. Pictured below, the series host Josh Klein meets and moves a 3D model of himself in the IC-CRIME system, working with the series producer David Hull to choreograph moves of the virtual host we custom-built for the show.

Following a day of filming in our Digital Games Research Center lab, the crew went on a nighttime patrol with the Wake County Sheriff's Department and then set up the next morning at an empty house in East Raleigh. This house contained a mock crime scene the IC-CRIME team had set up the week before with the generous assistance and expert guidance of the Raleigh/Wake County CCBI (City County Bureau of Investigation). Based on an actual murder committed in the same neighborhood last year the scene included evidence such as fired shell casings, a bullet lodged in a wall, and a motionless body covered in fake blood (supplied by one of our more sedentary researchers).

The scene was photographed and laser scanned using technology from 3rd Tech, a company based in nearby Chapel Hill, North Carolina. The digital 3-D model of the crime scene was then loaded into the IC-CRIME system, which is built on the Unity3D game engine. IC-CRIME creates an integrated platform that encourages investigators and forensic experts to view, explore, and annotate such models at any time from any web browser. Our goal is to expand opportunities for collaboration between professionals whose geographic locations and time commitments would otherwise limit their ability to contribute to the analysis of the actual crime scenes.
For the television program, the system allows the host's 3-D avatar to be filmed walking through models of the same rooms that the flesh and blood host was filmed walking through in the house in East Raleigh. On the left is a photograph of the sofa on which our hypothetical victim lounged before he was shot, while on the right is a screen capture from the IC-CRIME system of the sofa after it was scanned and loaded into the system.

The IC-CRIME system plays a prominent role in this, the third episode of the series to be filmed by the U.K. based crew. The show opens and closes with our project, showcasing the software, interviewing principal investigator Dr. Michael Young, and showing other members of our team in non-speaking roles as researchers, technicians, and a “mostly-dead” body.