Fluid Flow Experience: Interactive Display
## OTT ID #1417

APPLICATIONS

This novel interactive display projects a computer-generated depiction of fluid flow against a wall or other surface.

KEY BENEFITS

- **Useful:** installation in multiple settings, such as, classrooms, amusement parks, airport terminals, and train stations to name a few

- **Fun:** parents and kids alike could be active, burn some energy, and also learn about fluid and air flow

- **Educational:** scientifically accurate software models fluid and/or air flow which may be used for teaching in school or university courses

- **Options:** sound sensitive versions may be utilized for music performances and on stage

- **Flexible Set-up:** A range of pricing for projection and CPU components can be utilized to fit your budget needs and your specific display space
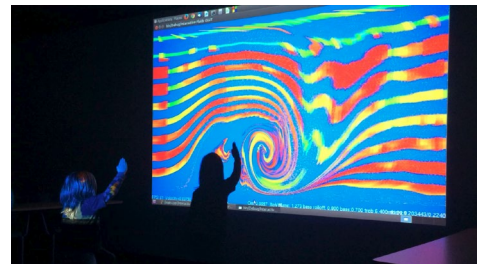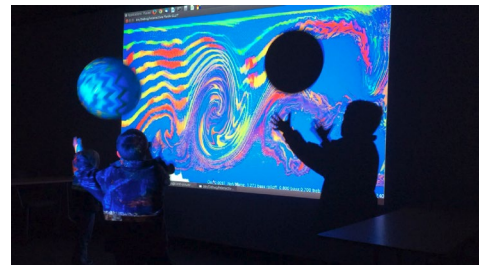
TECHNOLOGY

When any object is placed in the path of the projector beam, casting a shadow in the image, the fluid flow changes to seemingly flow around the shadow.

Large projections can allow participants to walk in front of the image and see the fluid swirl and flow around their silhouettes. In addition, objects of interest such as airfoils, models of fish, and any other object can be suspended by fine wires or utilized as puppets to observe the flow around these objects. If the projected surface is a whiteboard, shapes can be drawn on the whiteboard in dark marker, or dark refrigerator magnets could be used on a magnetic surface.

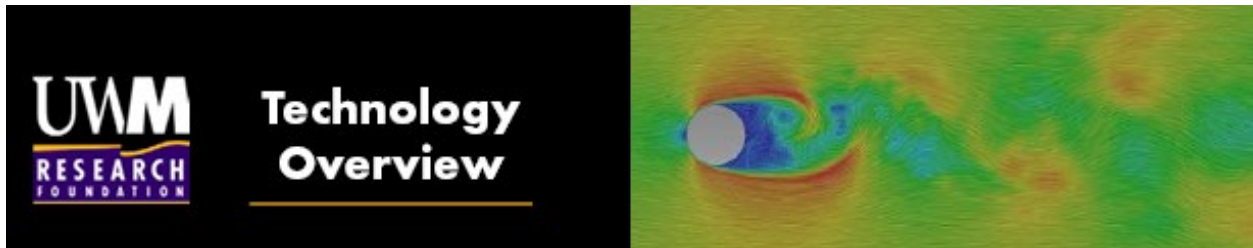***To see the technology in action, please follow these links:***
https://www.youtube.com/watch?v=cLQ98Wizx7Y

https://youtu.be/NG2vbz3hODc

https://youtu.be/OO6Ywrq4brA

INTELLECTUAL PROPERTY

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INVENTOR

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Tom Hansen is Senior Information Processing Consultant and Ph.D. candidate in the School of Freshwater Sciences at the University of Wisconsin-Milwaukee. Tom is involved in many areas of research at the School, including database and information systems design, networking, data visualization, and the design and deployment of environmental sensors: aboard ships, on buoys, as well as on land. Tom has been a professional app designer, software engineer, and database architect for over 25 years, in diverse industries including health care, real estate, and science. Most recently, Tom has been concurrently pursuing a Ph.D. in Freshwater Science.

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