Topics in Wearable Computing

INF 632

Monday and Wednesday 12:45 - 2:00 Dr. Winfree (kyle.winfree@nau.edu)



This project-based course is intended to provide a graduate-level study of wearable technologies, including the use of commercially available devices, such as the Fitbit. The course centers on the application of wearable technologies in healthcare and wellness. Topics include applications of wearable technologies in health research, comparative studies, projects involving the creation of custom health monitoring devices, data analysis, real-time analysis techniques, and machine learning. Students will engage in iterative design projects that explore and apply a variety of wearable technology techniques and scholarly literature reviews that explore open research areas in the field.

By the end of the course, you will have designed and created a wearable computing device, implemented several methods of statistical learning, and explored aspects of feedback such as haptic interfaces.

Wearable computer

Wearable computers, also known as body-borne computers or wearables are miniature electronic devices that are worn under, with or on top of clothing. More at Wikipedi

Activity tracker - An activity tracker or fitness tracker is a device or ap.. Apple Watch - Apple Watch is a line of smartwatches, or a touch-scre.. Augmented reality - Augmented reality is a live direct or indirect view... Active tag - Radio-frequency identification uses electromagnetic field... Calculator watch - A calculator watch is a digital watch with a built in .. Computer-mediated reality - Computer-mediated reality refers to the Ambient intelligence Wearable computers Ubiquitous computing

Personal digital assistants

Mobile computers Internet of Things

Fashion accessories

Human-computer interaction