

How Wearable Tech is Shaping The Future of Athletes Everywhere

Last month, Mindgrub hosted the [Chesapeake Regional Tech Council's](#) Emerging Tech Forum. The event featured lightning talks and a panel discussion on wearable tech, with representatives from Under Armour, CoreSyte, MilestonePod and Plantronics. Event attendees learned about the recent wearable product advancements happening at these regional companies.

Monitoring your heart

Under Armour is all about athletic performance, and so is their new wearable product, [Armour39](#). Panelist Nathan Dau, a sports researcher at Under Armour, described their product: "Armour39 is a bluetooth heart rate monitor built to be the best heart monitor in the gym for non-performance athletes."

A simple band that goes across the chest, the product is made to feel invisible to the wearer. The NFL currently uses Armour39 in players' shirts during scouting to monitor prospects for the NFL draft. With a built-in heart rate monitor and complete with a nine-access sensor, this piece of wearable technology measures acceleration, position and rotation. Under Armour's goal is to collect new data metrics to help NFL teams know more about the players they are potentially drafting.

A bandage that tracks vital data

Akin to an adhesive bandage, [Coresytle's](#) new wearable product acts as an early warning system that measures and monitors a variety of bodily functions and fluids. This piece of technological genius is used to track performance biomarkers before, during and after a game or workout.

The embedded sensors in the bandage track chemicals in the body, like potassium and sodium. Vital data, including information about electrolytes, skin temperature and lactic acid, is sent to the user's smartphone. Dalton Pont, Executive Director of Coresytle, mentioned that the bandage is also used for preventive measures: "If you've had a head injury it will start to recognize very unique things about your neural peptides." The data acts as a catalyst for cautionary alerts when levels are departing ideal conditions.

Heads up for hands-free safety

[Plantronics](#) presented their headset device, complete with a nine-axis gyroscope, 3D access, tap detection and built-in sensors. The headset automatically senses when it's in use and is being produced for wide array of industries.

Plantronics Account Manager Melissa Johnson spoke about the many ways their headset can assist users. It can control video games, direct slideshows and assist drivers, among other functions. If worn while driving, the sensors can track when the user is nodding off and keep them alert. Johnson described a unique function of the headset: "It has freefall detection, so if I

drop it, it says *freefall*; it can also say *freefall* not wearing.” She went into further detail about freefall technology: If a BGE worker was working and the headset was dropped, the headset can show that it has fallen. Additionally, if the user falls while wearing the device, it can report the accident.

Improving your distance and stride

[Milestone Pod](#) presented their tracker, a pod that fits easily on a shoestring and measures how many miles the user ran. It’s an odometer, but with many more features. It can track running habits, and lets the user know when their shoes need an upgrade. The pod also helps the user correct mistakes, for example, if your heels strike while running, the pod can send information on how to control the error.

Milestone Sports CEO Jason Kaplan described the pod as a, “connection to other stakeholders in your life.” In order to make the connectivity work, Milestone is partnering with RoadRunner sports and piloting the way data is sent from the pod to the franchise stores. The free mobile app is one of the ways the data and the pod work together. When a user has ran over 100 miles, the app gives five usage-based offers. The app also lets you know it’s time to replace your shoes, after about 350 miles ran.

The CRTC Emerging Technology Forum was an amazing display of new wearable technologies, brought to life by these regional companies, who are advancing wearable technology, as well as bringing necessary preventive measures to aid athletes of all levels.