## SPY ON SPORTS FANS

STADIUMGOERS, PREPARE TO BE WATCHED. Technology has already revolutionized the games themselves. Armed with video footage, analytics software and a loyal squad of geeks, pro teams can now know every strength—and weakness—of their players, prospects and opponents. "But what if you turn that technology around to the fans?" asks George Williams, a computer scientist at NYU's Movement Lab. After all, the fans pay the bills, so teams would love to know which players get crowds jumping, which music makes them dance and whether or not the mascot entertains them during downtime.

Williams has all that information. He's spent the past three years developing new camera software that scans facial expressions to identify fan behaviors—think cheering, jeering, talking on a cell phone—in real time at a stadium. So a company can measure, for example, how many eyeballs are attached to a Jumbotron ad (are fans looking?) and how well it's being received (are they laughing? Smiling? Fiddling on their phones and ignoring it?).

In other words, it's like Nielsen ratings for crowd behavior at a sports event. Says one NFL executive, who watched Williams unveil his creation at the annual MIT Sloan Sports Analytics conference in early March: "That information is incredibly valuable."

Naturally, the tech raises privacy concerns. But Williams says stadiums that use it won't be recording actual footage of fans—at least not more than they already do for TV. The data appear more like a heat map, with different color splotches indicating different behaviors. Getting that kind of detailed feedback could encourage team owners to improve their ads and promotions—and, heck, even their teams—to create a more engaging experience and ultimately sell more tickets.

Williams says his service will get a slow rollout starting with one pro-sports organization in late summer. If that works well, it's not hard to imagine the program spreading to most stadiums—and similar tech popping up in airports, concert venues and even your local shopping mall.

