

SUCCESS STORY



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Mindfull Solutions Inc.

Empowering Movement: MindFull's Journey to Connection Using Wearable Biofeedback Technology

MindFull Solutions Inc. (MindFull) helps athletes and people with movement disability have agency in their movement. Our mission is to create shared knowledge with biofeedback wearable tech for athletes and people with movement dysfunction. Mindfull's first solution is a low back Internet of Things (IoT) wearable that quantifies movement wellbeing and performance allowing athletes to assess and improve core engagement, movement symmetry, and low back joint stability. We then connect users and the people who care for them with shareable data. This allows their therapist, trainer, coach, or doctor an easier path for person-centered care, better communication and, ultimately, stronger relationships.

We're dedicated to empowering athletes and individuals with movement disabilities through innovative wearable technology is commendable and unique. However, the journey towards achieving this mission is not without its challenges, especially for a sole founder striving to make an impact across diverse markets and communities. This is where programs like BioAlberta's WIL Voucher play a crucial role. By providing support to fill essential positions within startups like MindFull, BioAlberta facilitates the translation of vision into tangible outcomes. With BioAlberta's support, we've gained access to a pool of talent, equipped with the expertise necessary to navigate the complexities of bringing novel solutions to the forefront of diverse markets. Students who are eager to learn in the intersection of biomechanics, product development, business insights, research, and reading statistics. This collaboration not only accelerates the realization of MindFull's goals but also fosters innovation within



Shadan Al-Saket

the biofeedback wearable technology sector, ultimately benefiting athletes, their coaches, individuals with movement dysfunction, and practitioners on a global scale.



Mindfull's wearable tech

By delving into the intricate relationship between humans and technology, our objective is to cultivate a robust network that not only facilitates interaction but also serves as a catalyst for personal empowerment through movement. We recognize that technology has become an integral part of modern life, influencing the way we communicate, work, and even move. Through our exploration, we seek to harness the potential of technology not just to enhance functionality, but to also nurture a deeper understanding of our bodies and capabilities. Our vision is to create a platform where individuals can seamlessly integrate technological advancements into their movement practices, thereby fostering a

sense of confidence, self-awareness, and empowerment. Whether it's through wearable devices that provide real-time feedback or virtual communities that offer support and encouragement, our goal is to empower people of all backgrounds and abilities to embrace movement as a tool for personal growth and transformation.

An early project at MindFull was to make business connections with high performance coaches across North America through contacts and emails. Our connection with coaches gave us the opportunity to host Athlete Testing Sessions with high level track sprinters and personally witness our goals in action. Simultaneous to building our network, Shadan carried out a literature review that explored the existing knowledge on joint stability at the hip and pelvis during high-speed sprinting. This helped her use her newfound understanding of the importance of core engagement while interacting with coaches and athletes. Athletes and individuals who have engaged in our Athlete Testing Sessions have shared their experience while wearing the device and attested to the fact that the haptic feedback significantly improved their movement. Shadan's ongoing industry study seeks to support these anecdotal accounts with robust scientific evidence.

The purpose of the current research project is to examine how vibrational biofeedback (haptic feedback) influences hip joint stability in medium and high-speed sprinting. Our industry study was designed as an exploration. We used a grounded theory approach to allow the data to inform our theoretical approach. By integrating motion capture with our device and qualitative questioning, we can compare movement interventions to the gold-standard biomechanical measurement while accounting for not just how the athlete adapts to the stimulus but also how the athlete feels with the stimulus.



Athlete testing at the Canadian Sport Institute's Sport Product Testing Lab

By exploring the human connection to our technology we aim to build a network that empowers people to build confidence through movement.

“I’m an avid believer in loving what you do and why you do it. MindFull has given me a space to explore the relevance of my degree in Biomechanics to business and technology. All the work I do aims to help a variety of populations from athletes to individuals with movement dysfunction and it brings me so much joy to be a part of something that will positively impact countless lives.” ~ Shadan

Find us:

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WIL VOUCHER

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