StretchSense is an 80+ person company based in Auckland, New Zealand with a Sales office in Portland, Oregon.

We Specialize In
The rapid production of:

• Customized, stretchable, sensing systems
• Seamlessly integrated onto fabric
• That capture data from body motion
We Provide

Rapid production of a customized prototype

After a consultation and design review you can have a custom wearable sensing system in your hands, ready for development within a matter of weeks.

For fast iteration

Our flexible manufacturing processes allow you to iterate quickly with multiple prototypes. Our team can assist you with problem solving and product development.

So you can test your product

Scale up production economically so you can validate demand for your product in the market.
We are at the beginning of an age where people and technology merge through ubiquitous devices that are integrated into every facet of our lives.
CREATE
KNOWLEDGE
ENERGY
OPPORTUNITY
ENTERTAINMENT
IMPROVED PERFORMANCE
ENHANCED WELL-BEING

FROM
BODY
MOTION
Value From Body Motion

Value from the business opportunities created
Through innovation, new industries and products at the forefront of this nascent field.

Value provided to the end user
Through applications that provide entertainment or enable improvement in human abilities, societal outcomes, and quality of life.

StretchSense™
With body motion data you can create a wide range of applications in many varied sub-sectors.

1. Body Motion
2. Data
3. Information
4. Improved Performance

StretchSense™
What do you want to discover?
From data collected through a sensing system in a glove, undergarment, or a piece of fitness apparel, you can create applications designed to:

- Interact with virtual environments
- Aid rehabilitation
- Improve performance
- Reduce injury

StretchSense™
Information generated from body motion allows us to expand our knowledge of ourselves beyond the range of our five senses.
A Massive Convergence of Technologies

Advanced wearable technology is now possible due to rapid advances in:

- Machine Learning
- Hardware miniaturization
- Computing power
- Low power circuitry
- Mass data storage
- Internet-enabled information accessibility
Has Led to Real Smart Sensing

Machine learning algorithms have excellent predictive capabilities. They can make high-accuracy predictions by discovering structure and relationships in data which is beyond the reach of humans to uncover. Because of this, it’s possible to quickly and automatically produce models that can analyze complex data and deliver fast, accurate results.
Why Are We Better Than the Alternatives?

Our stretch sensors capture motion precisely enough to track fingers, respiratory rate and the contraction of muscle groups.

Our services allow you to create a customized wearable sensing solution tailored for your unique application.
Other Industries

Our sensors are precise and robust. Crucial properties for the demands of body worn applications and other circumstances when measuring large amounts of strain is required.

Nasa engineers independently tested our fabric stretch sensor against a range of resistive options.

https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20160014024.pdf
About Us

StretchSense began in 2012 as a spin out from the Biomimetics Lab of the Auckland Bioengineering Institute, University of Auckland. Since then StretchSense has secured investment from Ralf Muller, Auckland UniServices Limited, Flying Kiwi Angels, New Zealand Venture Investment Fund, and Start Today Co Ltd.

The team has been developing and refining our electroactive polymer technology for over a decade. We are experts in manufacturing custom sensing systems and helping our customers integrate them into commercial products. We pride ourselves on solving real problems and solving problems others can’t.

Our customers operate at the cutting edge of their fields, and we take their privacy seriously. With strict controls in place, we keep customer names and commercially sensitive information safe within our organization. What we can say is that our clients are creating some amazing products in the areas of fitness technology, health, gaming, and VR / AR. StretchSense has made it our mission to push the boundaries of wearable technology, and we can work with you to develop your unique application.