

# Sensing & Algorithms Engineer

At Tanvas, our mission is to make your interactions with touchscreens more interesting, more natural, and more engaging. We have developed an innovative surface haptic touchscreen technology that in addition to tracking fingertips, but controls what they feel: textures, edges, collisions, and even the illusion of shape on a featureless glass panel. Tanvas is based in downtown Chicago's easy-access west loop neighborhood. If you're looking for a vibrant, growing company whose culture is one of open debate, continual learning, independent work and peer-to-peer accountability, we are the right choice for your next career move.

## The Challenge:

We are developing a novel capacitive sensor integrated with variable friction surface haptic touchscreens. Sensing algorithms run on an embedded processor to track touch locations based on real-time capacitance data streams. As our sensing and algorithms engineer, you will be responsible for creating the touchscreen user experience of the future, driving forward the development of ultra-fast low-latency touch feedback systems.

## The Job:

- Develop and tune algorithms for processing real-time sensor image data
- Implement algorithms in bare-metal embedded processor
- Optimize algorithm performance and assess impact on user experience
- Maintain automated testing procedures to ensure validity of tracking
- Work closely with the hardware development team to inform future sensor design
- Contribute to a team atmosphere that values open, spirited debate, accountability, and a focus on company goals.

## The Candidate:

- 5+ years of programming in C or C++
- Experience with real-time data processing
- Python/Matlab scripting experience
- Familiarity with object tracking and feature extraction is a plus
- Experience with touch tracking algorithms is a plus
- Relevant background in computer vision and/or machine learning is a plus
- Bachelor's degree in Computer Science minimum
- Excellent communication skills

**The Benefits:** Full time Tanvas employees are eligible for paid vacation, full health coverage, dental, vision and other benefits including HSA, commuter benefit plan, and 401K.

## The Next Step:

Email your resume to [jobs@tanvas.co](mailto:jobs@tanvas.co) *Note: You must have valid U.S. work authorization*

Tanvas is an equal employment opportunity employer