Souce: http://www.masonchang.com/blog/2014/8/25/androids-touch-resampling-algorithm

Title: Android’s Touch Resampling Algorithm

This blog discus how Android’s touch resampling algorithm works. It says here that Android uses a combination of touch extrapolation and touch interpolation. In touch interpolation two touch events are taken and somewhere in the middle of it, another touch event is created thus will be used as a responsive touch; and in touch extrapolation, two touch events are taken and in order to predict the next touch, a touch event is created in front of the last touch event to ease the use of the users.

Source: <http://www.ti.com/lit/an/slyt277/slyt277.pdf>

Title: Getting in Touch with Capacitance Sensor Algorithms

This paper explains relevant information regarding to capacitance sensor algorithms such as mutual and self-capacitance. Self-capacitance is an approach in determining the position of the finger/s but only works fine with single touch systems while the mutual capacitance on the other hand works great with multiple touch systems. In parallel with multiple touch system, this paper also discussed the problem: how many is too many. Another subject which is discussed in this paper is the noise and system issues. Noise in touchscreen systems is one of the common problem that should be tackled and a common generator of noise is the LCD for it often has voltage transient which generate unwanted volts but certain algorithms can reject most of the noise source. This paper also briefly discussed the calibration touch. Although various touchscreen solutions needs the end user or the manufacturers to calibrate the device before use, self-calibration algorithms comes as a resolution which allows the chip independently regardless of the user or manufacturing calibration.