Accelerometer Writing Tool

One can use an accelerometer to write letter by first tracing out letters with the device. After saving the acceleration data of the path taken by the device, one can reconstruct the position traced by the accelerometer. The data is given as a series of data points. Each data point contains three elements: the time at which the data point was recorded, the acceleration at this moment felt in the X direction and in the Y direction. One can convert this to position data by discrete integration: