

Music from Motion

Case Study: Music from Motion

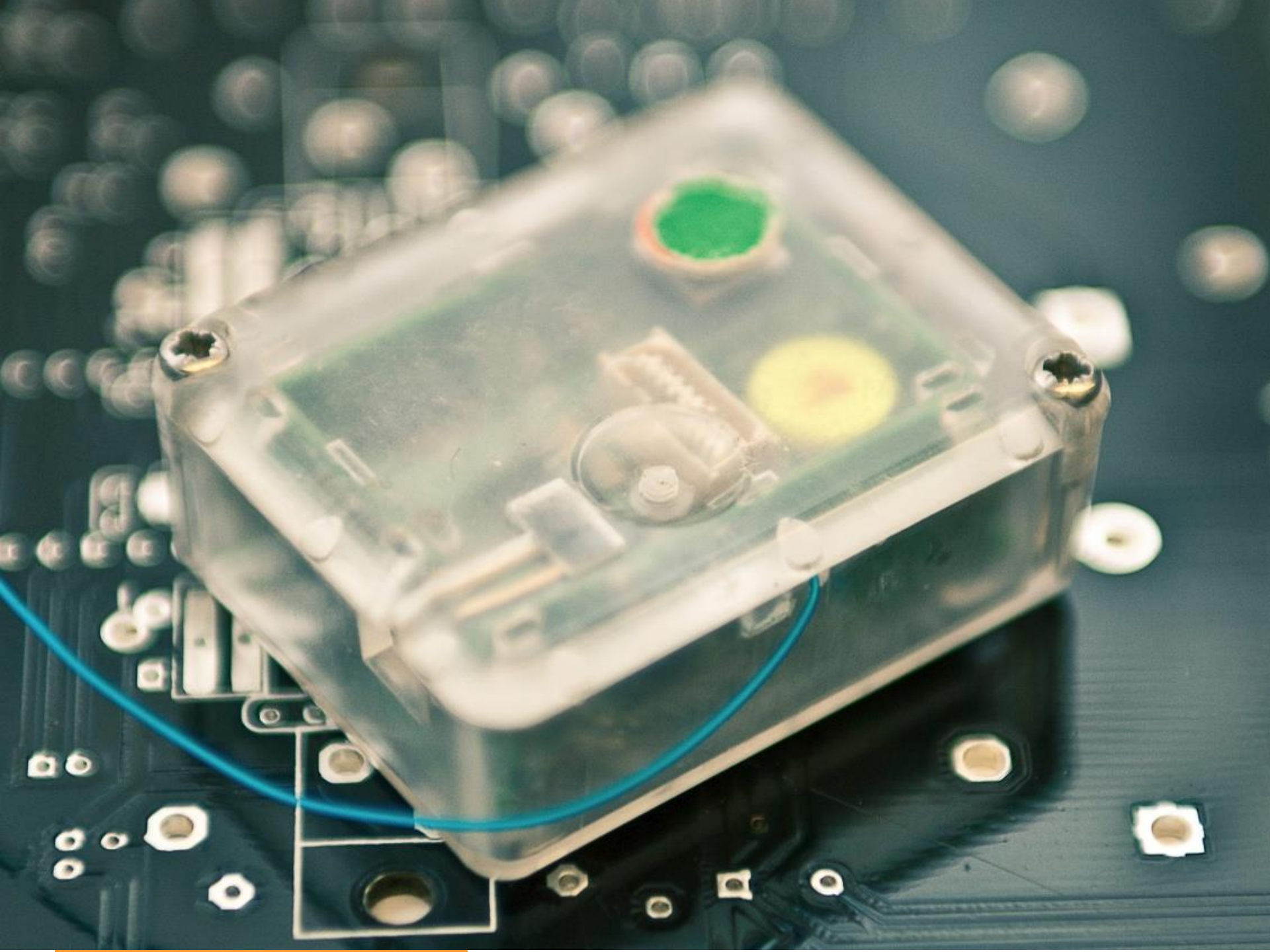
- Category : Artistic
- Requirements: Wearable, unobtrusive, free movement, 3-D motion in real-time, instantaneous sound response (msec.)
- Users: Dancer/choreographer; the audience as part of a theatre performance
- Sensors: 3-D Acc'meter, gyros, magnetometer
- Actuators: sound sequences mediated by movement
- Data Analysis: Calculate orientation in 3-D space from sensor data; Sensor data: 512Hz, Quaternion angles: 256Hz
- Wireless protocol: 2.4GHz Zigbee radio: 150kbits/s; TDMA protocol: 128Hz update rate with 12 devices; 64 Hz update rate with 24 devices.



KINECT
for XBOX 360

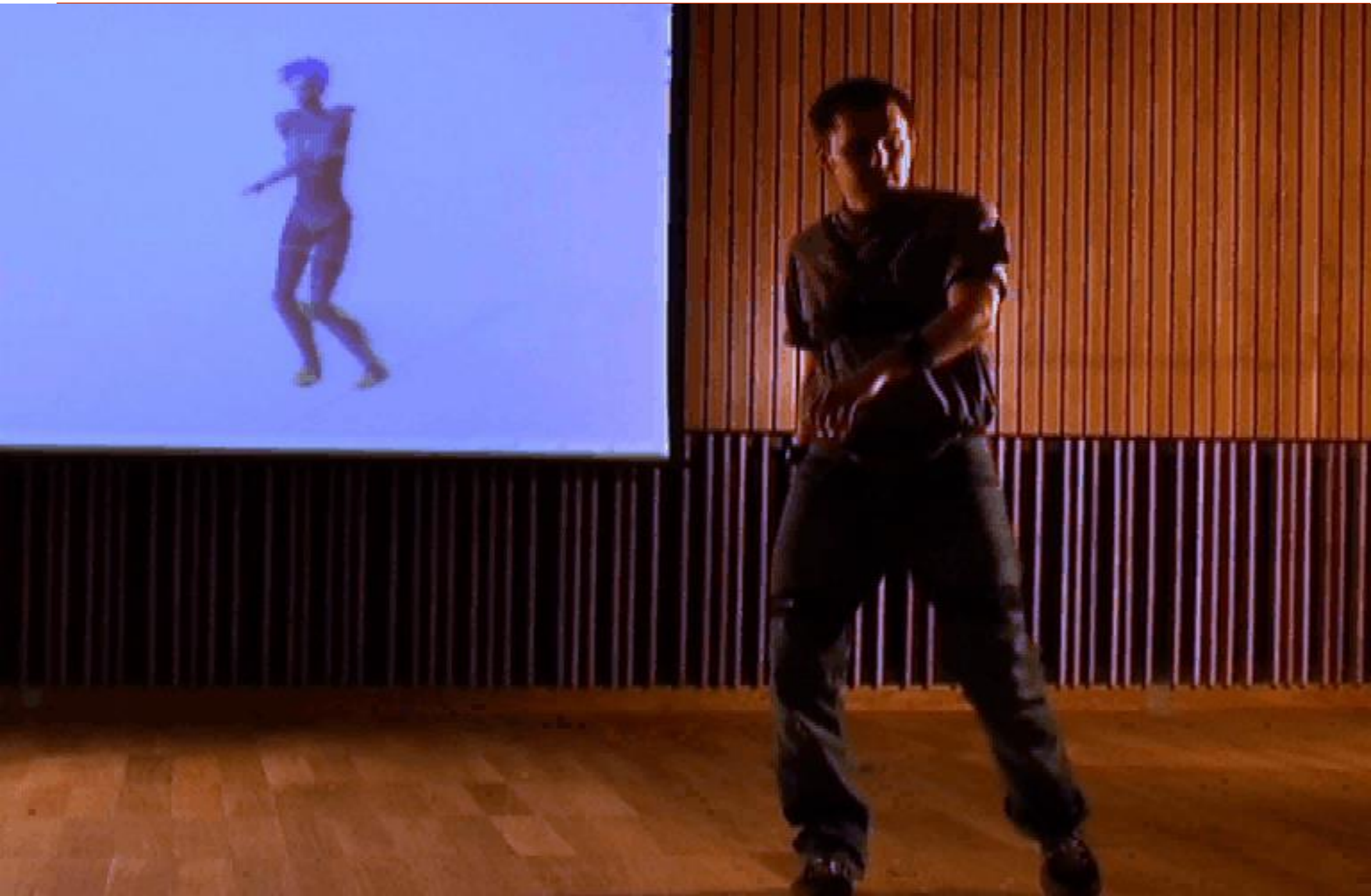
Requirements for motion capture

- Capture, Analyse and Understand Motion
- Fully wireless
- No infrastructure (i.e. camera(s))
- Real-Time and Interactive
- Easy to use
- Banalise the technology
- Democratisise its usage





Video at www.specknet.org



Video at www.specknet.org