

Fig. S1. All joint rotations for all individuals. Each individual is represented by a different color, with a consistent color scheme in this figure and Supplementary Figure 3. Positive values represent joint extension and adduction. A) Ankle joint flexion-extension. B) Knee joint flexion-extension. C) Hip joint flexion-extension. D) Ilio-sacral joint flexion-extension. E) Ankle joint adduction-abduction. F) Knee joint adduction-abduction. G) Hip joint adduction-abduction. H) Ilio-sacral joint adduction-abduction. I) Ankle joint long-axis rotation. J) Knee joint long-axis rotation. K) Hip joint long-axis rotation. L) Ilio-sacral joint long-axis rotation.

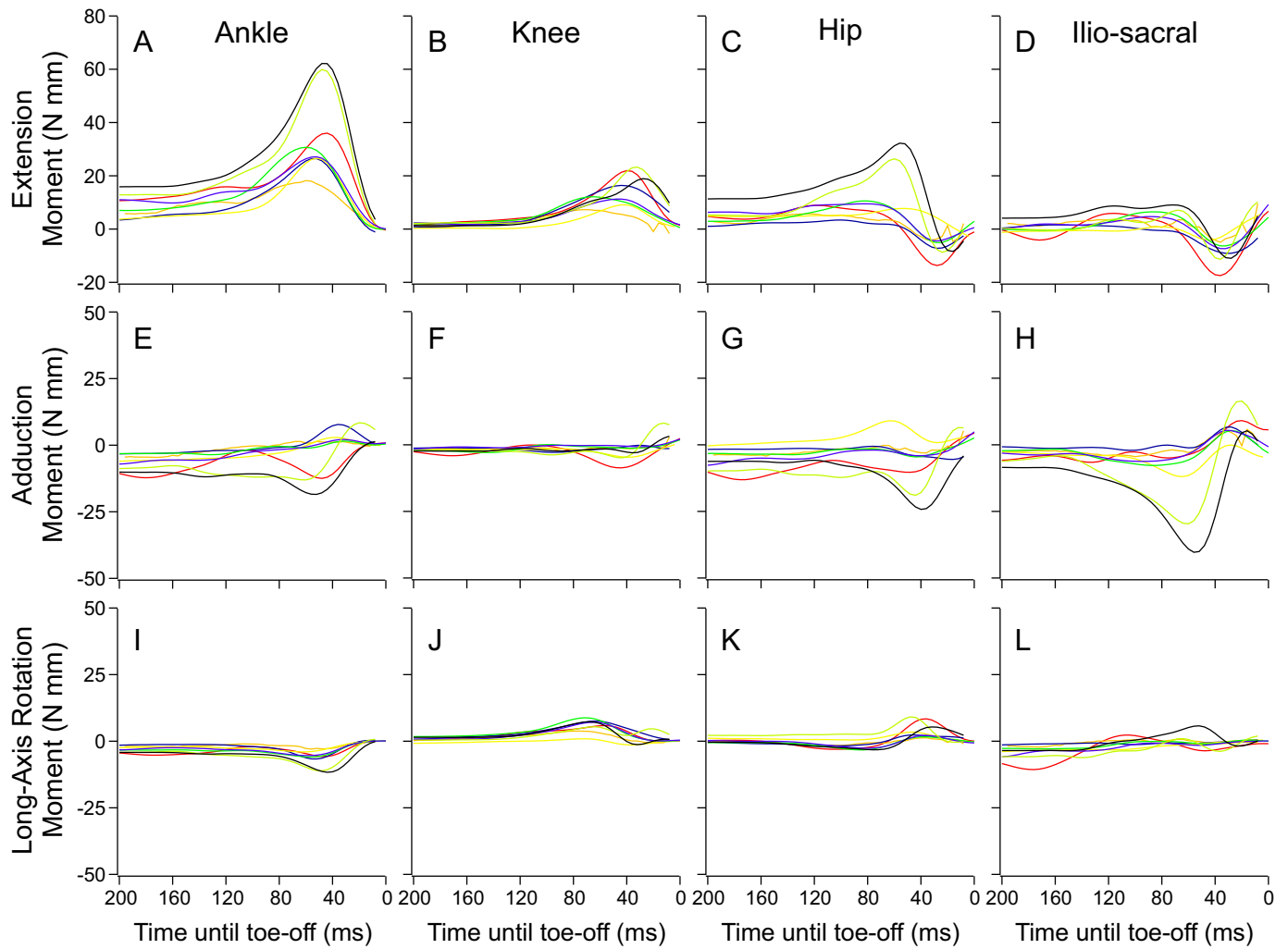


Fig. S2. All joint moments for all individuals. Each individual is represented by a different color, with a consistent color scheme in this figure and Supplementary Figure 2. A) Ankle joint extension moment. B) Knee joint extension moment. C) Hip joint extension moment. D) Ilio-sacral joint extension moment. E) Ankle joint adduction moment. F) Knee joint adduction moment. G) Hip joint adduction moment. H) Ilio-sacral joint adduction moment. I) Ankle joint long-axis rotation moment. J) Knee joint long-axis rotation moment. K) Hip joint long-axis rotation moment. L) Ilio-sacral joint long-axis rotation moment.

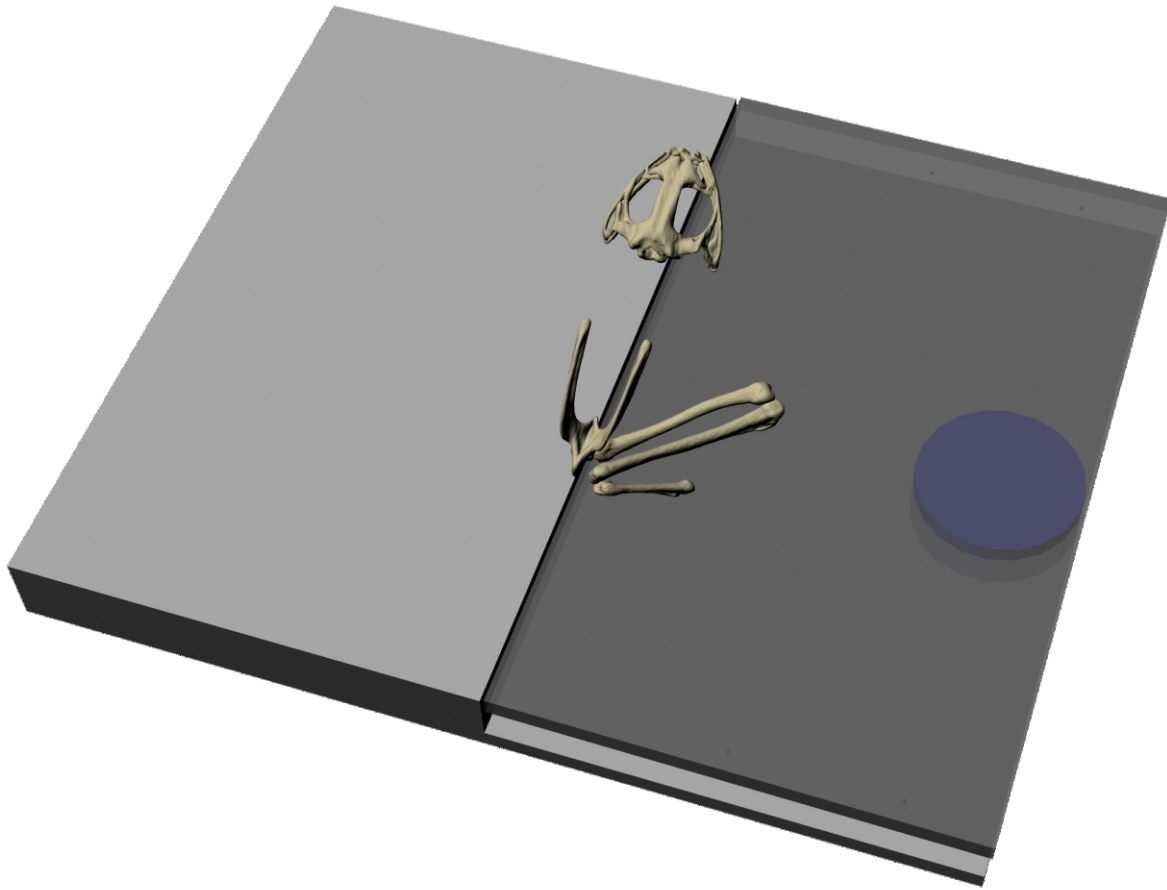


Fig. S3. Reconstruction of the force sensor and custom housing. The force sensor is the blue cylinder, the sensing portion of the platform is shown in dark grey, the inert portion of the platform and base is shown in light grey. Frog bones are shown in starting posture.

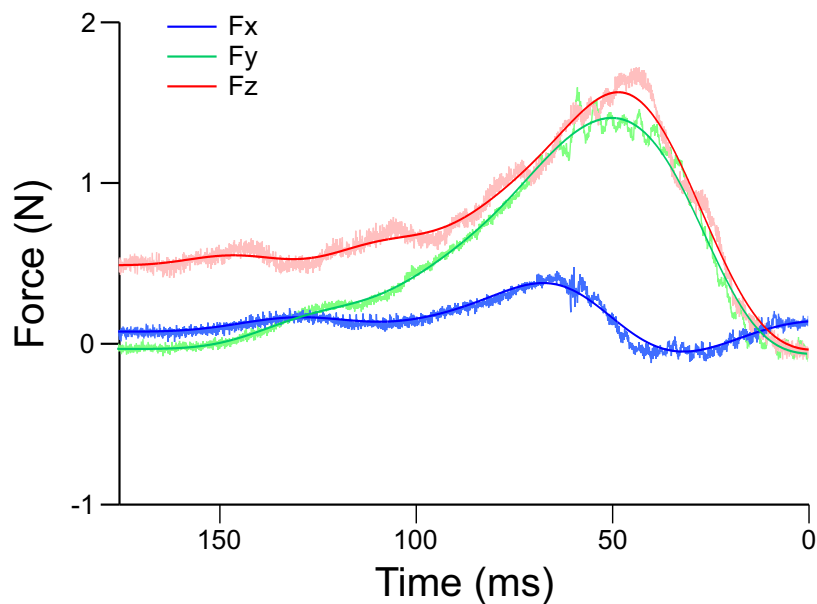


Fig. S4. The filtered and unfiltered forces recorded from the forceplate for a single jump. Pale colors are the unfiltered data and solid colors are the filtered. This jump was filtered with a 25 Hz low-pass IIR filter with a Hanning window.

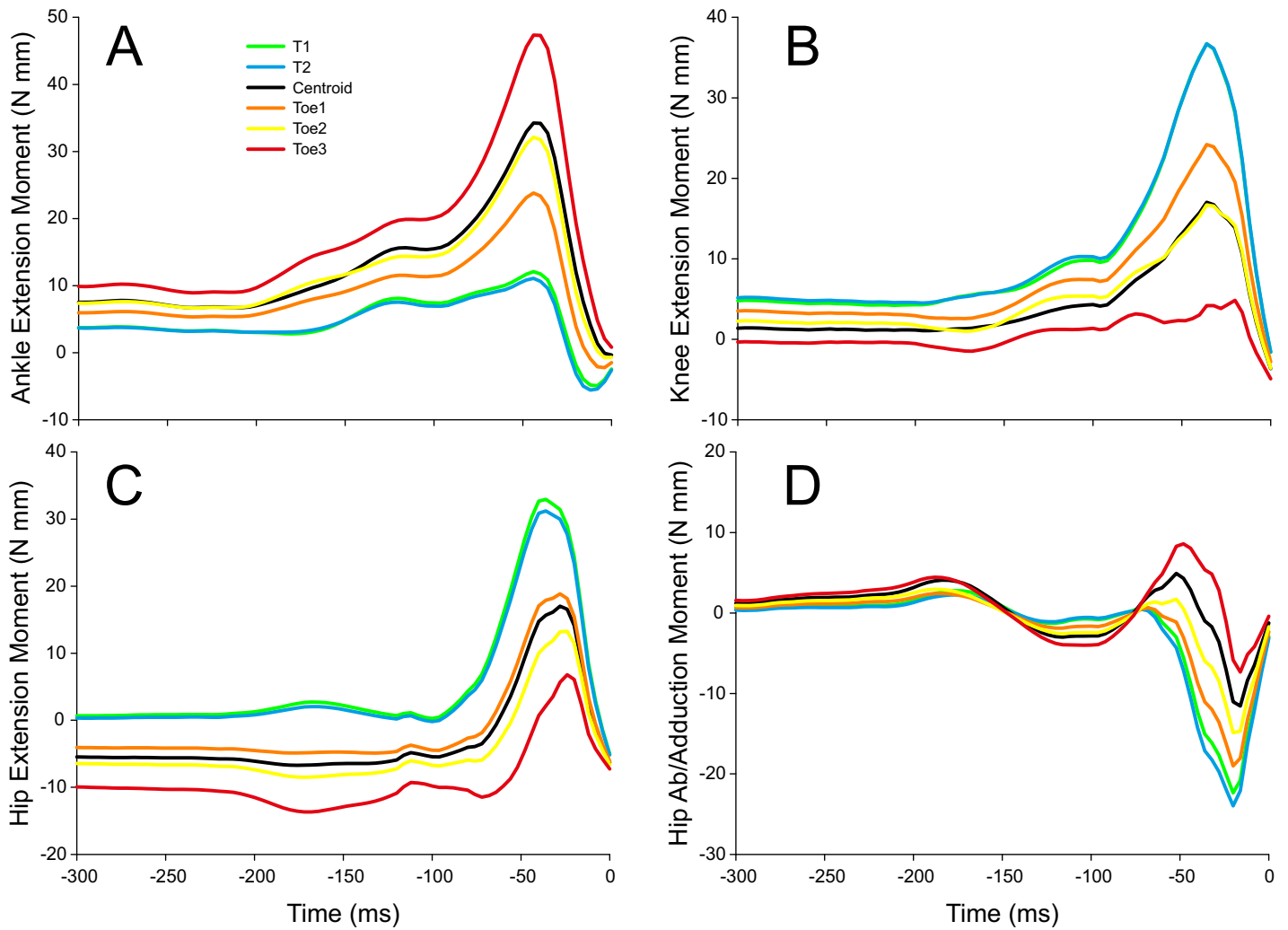


Fig. S5. Sensitivity test data. Moments are given for the same force and jump with the center of pressure located at the tips of the three shorter toes, the most lateral points of the distal tarsal (T1 & T2), and the centroid of the foot. A) Ankle extension moment. B) Knee extension moment. C) Hip extension moment. D) Hip adduction moment.



Movie 1. X-ray video of the example jump shown in Fig. 2, with roto-scoped bones and a scaled GRF vector. This is a postero-dorsal view, ~45 deg off vertical.