Essentia Dynamics is a software company that provides advanced solutions for dynamic model identification and control of mechanical systems, including robots, vehicles and airplanes. We provide source code (C/C++) for hard real-time applications based on symbolic recursive Newton-Euler techniques.

Dynamic parameter identification methods are based on Linear Matrix Inequalities (LMIs) linked to SDP programming, guaranteeing the best physically feasible estimations for a given data set.

Design of nonlinear control architectures using discrete state space techniques for accurate dynamic tracking of nonlinear references.