Hi Meda,   
  
I was able to compute the DH parameters based off the link lengths provided in the manuals and confirming the link lengths through the cartesian coordinates shown on SmartPad. The cartesian coordinates predicted by the forward kinematics using these DH parameters match very well the cartesian coordinates from the SmartPad:  
  
(This copied from a piece of Matlab code I had written, so please pardon the Matlab syntax)  
  
% Define the parameters  
Hbase  = 0.340;  
d3 = 0.4;  
d5 = 0.4;  
Htool = 0.0;  
  
% Create the DH chain.   
%  
%        theta     d        a       alpha   prismatic  
DHlbr = [ 0        0        0      -pi/2      0      ;...  
          0        0        0       pi/2      0      ;...  
          0        d3       0       pi/2      0      ;...  
          0        0        0      -pi/2      0      ;...  
          0        d5       0      -pi/2      0      ;...  
          0        0        0       pi/2      0      ;...  
          0        0        0       0         0      ];  
  
% Create the base frame  
Tbase = [eye(3) [0 ; 0 ; Hbase] ; 0 0 0 1];  
  
% Create the tool frame w.r.t. DH output frame  
Ttool = [eye(3) [0 ; 0; Htool] ; 0 0 0 1];  
  
Unfortunately, I cannot share the forward kinematics code which computes the Jacobian and gives cartesian coordinates for given joint positions due to company policy. However, using the above DH parameters it's a matter of simply implementing the standard textbook forward kinematics (or using any number of 3rd party libraries/APIs that would do it for you).   
  
I do not have the dynamic model of LBR IIWA 7 R800 (i.e. inertia matrix, gravity vector etc.), and would be very interested in learning if anyone else does.  
  
-Vinay