15-464/15-664 Reference List for January 27

The following paper is an excellent reference for Jacobian related techniques for solving inverse kinematics. I find its mathematical explanations to be very clear:

Buss, Samuel R. "Introduction to inverse kinematics with jacobian transpose, pseudoinverse and damped least squares methods." *IEEE Journal of Robotics and Automation* 17, no. 1-19 (2004): 16. http://math.ucsd.edu/~sbuss/ResearchWeb/ikmethods/iksurvey.pdf

You may also find the following survey useful. It collects a tremendous number of references organized by method of solution and is relatively up to date on current research related to Inverse Kinematics.

Aristidou, Andreas, Joan Lasenby, Yiorgos Chrysanthou, and Ariel Shamir. "Inverse Kinematics Techniques in Computer Graphics: A Survey." In *Computer Graphics Forum*, vol. 37, no. 6, pp. 35-58. 2018. https://onlinelibrary.wiley.com/doi/pdf/10.1111/cgf.13310

This slide deck, which may have been put together by Aryel Beck (if someone knows for sure, let me know), does a great job of portraying CCD IK in pictures.
http://www.cs.cmu.edu/~15464-s13/lectures/lecture6/InverseKinematicsBeck.ppt

The following references detail the mathematics for the 2D case, including equations and code.

Lander, Jeff. "Oh my god, I inverted kine." *Game Developer Magazine* 9 (1998): 9-14.
http://www.cs.cmu.edu/~15464-s13/lectures/lecture6/jlander_gamedev_sept98.pdf

Lander, Jeff. "Making kine more flexible." *Game Developer Magazine* 1, no. 15-22 (1998): 2.
http://graphics.cs.cmu.edu/nsp/course/15464-s15/www/lectures/lec06/jlander_gamedev_nov98.pdf