

Bibliografia

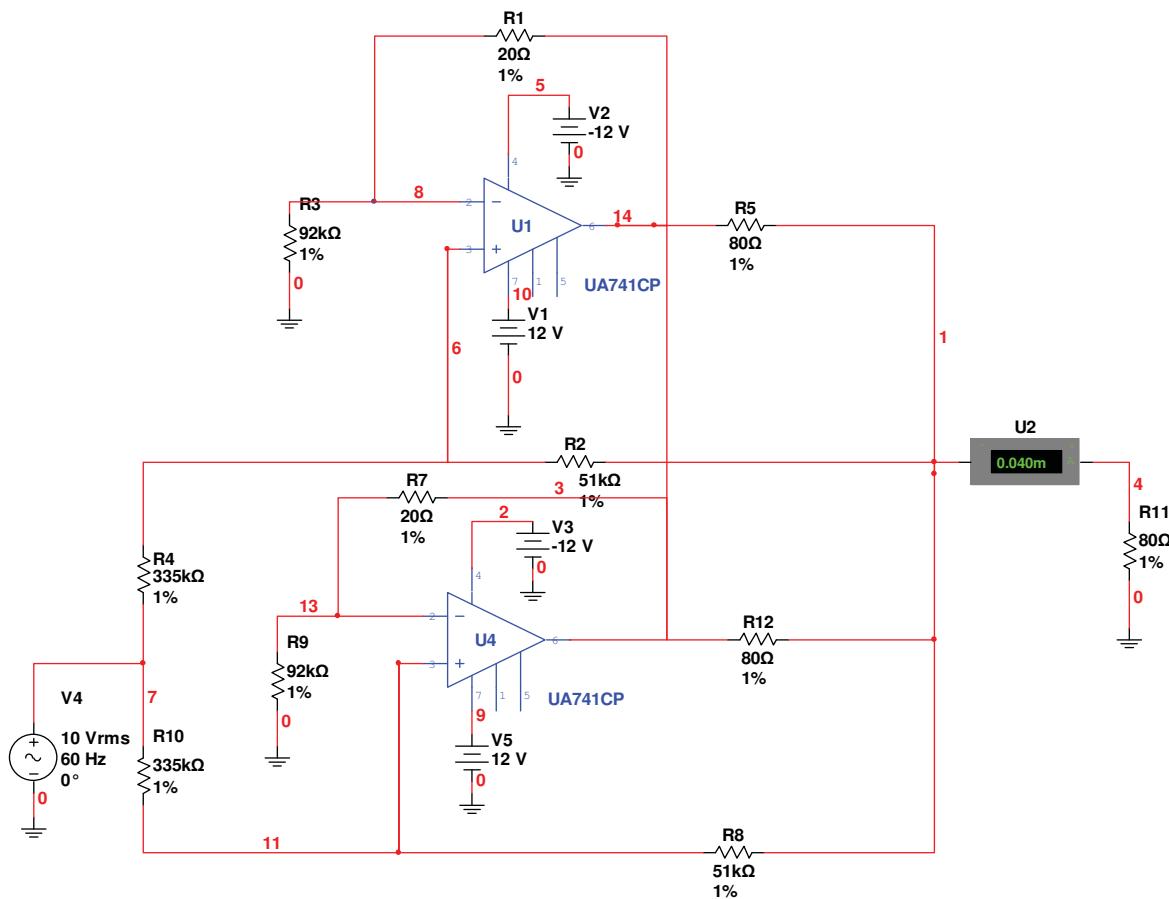
- [1] Jelali, M, Kroll, A. "Hydraulic Servo – System: Modeling, Identification and Control". New York: Springer, 2003, pp 10-126.
- [2] Ching Lu, H., Wen Chen L. "Robust Controller with Disturbance Rejection for Hydraulic Servo Systems". IEEE Transactions on Industrial Electronics, 40, 1993, pp. 152-162.
- [3] Ho Moon, J. Yong Doh, Jin Chung M. "An iterative Learning Control Scheme for Manipulators". Korea Advanced Institute Science and Technology.
- [4] Manual INSTRON. Model 8500 Plus. 1995. 200 pp.
- [5] Merritt HE. "Hydraulic Control Systems". John Wiley & Sons, 1967
- [6] Viersma TJ. "Analysis, Synthesis and Design of Hydraulic Servosystems and Pipelines. Elsevier.
- [7] Van Schothorst G. "Modelling of Long-Stroke Hydraulic Servo-Systems for Flighthsimulator Motion Control and System Design. Diss, Delft University of Technology, Netherlands.
- [8] Thayer W. J. "Transfer Functions for MOOG Servovalves". Technical Bulletin. New York – USA, 1965.
- [9] Godson RE, Leonard RG. " A Survey of Modeling techniques for Fluid Line Transient. J Basic Eng. 1972
- [10] Heintze J, Van Schorhorst G, Van der Weiden AJJ. "Modelling and Control of an Industrial Rotary Vane Actuator". IEE Confer Decision Control, San Antonio, USA.
- [11] Sorouspour, M., Salcudean S. "On the Nonlinear Control of Hydraulic Servo-Systems". Proceedings of the IEEE International Conference on Robotics and

Automation, San Francisco, 2000.

- [12] Doebelin, "System Dynamics; System Modeling and response". Prentice Hall, 1976.
- [13] De Souza, S. "Ensaios Mecânicos de Materiais Metálicos" . SP – Brasil. 1982.
- [14] Garcia, A. Alvares J. Dos Santos, C. "Ensaios dos Materiais". RJ – Brasil. 1999.
- [15] Andrew Alleyne, Rui Liu. "A Simplified Approach to Force Control for Electro-Hydraulic Systems". Pergamon. Illinois – USA , 2000.
- [16] Arimoto S., Kawamura S., Miyazaki F., Tamaki S. "Learning Control Theory for the Dynamical Systems". Proceeding of the 24th Conference on Decision and Control. Florida – USA, 1985.
- [17] Sun Hong. Chiu George. "Nonlinear Observer Based Force Control of Electro Hydraulic Actuators". Proceeding of the American Control Conference. San Diego – USA, 1999.
- [18] MOOG INC. "760 Series Servovalves". Catalog of the MOOG. New York – USA.
- [19] MTS System Corporation, "MTS 810 Material Testing System manual". MTS. USA, 2004.
- [20] Rezaeian, Mohammad, Grant Alex. "A Generalization of Arimoto-Blahut Algorithm". University of South Australia – Australia. 2004.
- [21] Bitter Bitt, Mohiuddin Taqi, Nawrocki Matt. "LabVIEW Advanced Programming Techniques". Taylor & Francis Group. Florida – USA. 2007.
- [22] O'Brien Richard T., "Bang – Bang Control for Type-2 Systems". Proceeding 38th Southeastern Symposium System Theory. Tennessee – USA, 2006.
- [23] King-Sun Fu. "Learning Control System". IEEE Transactions on Automatic Control. 1970, pp. 210 -221.

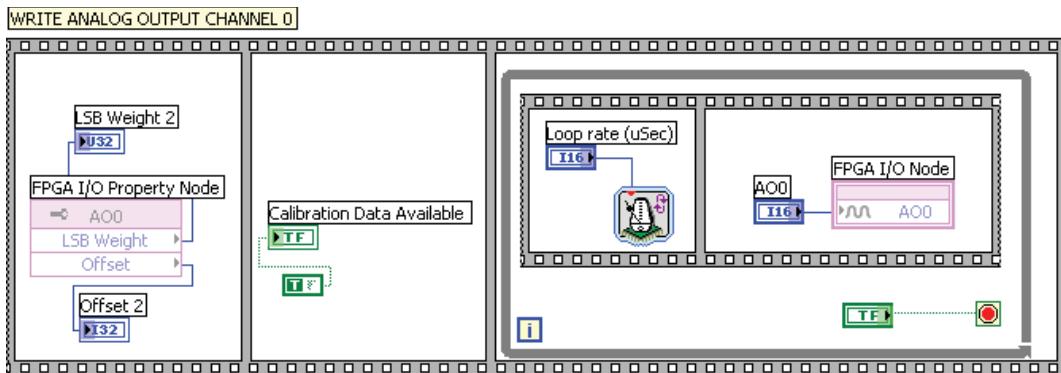
Apêndice

Conversor Voltagem – Corrente desenvolvido:

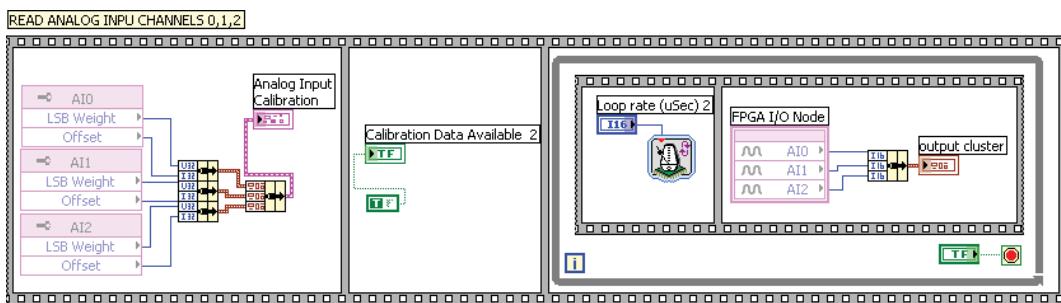


Programas feitos no LabVIEW para o controle por aprendizado

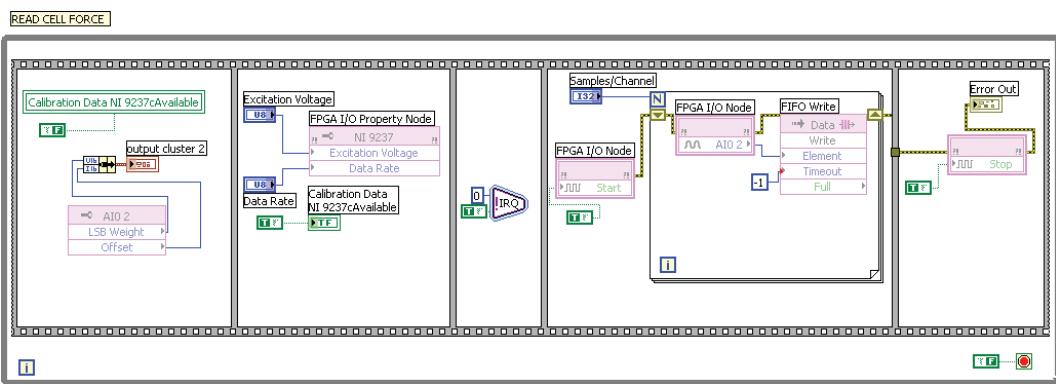
Configuração e Conversão D/A na Saída Analógica (Servo-válvula)



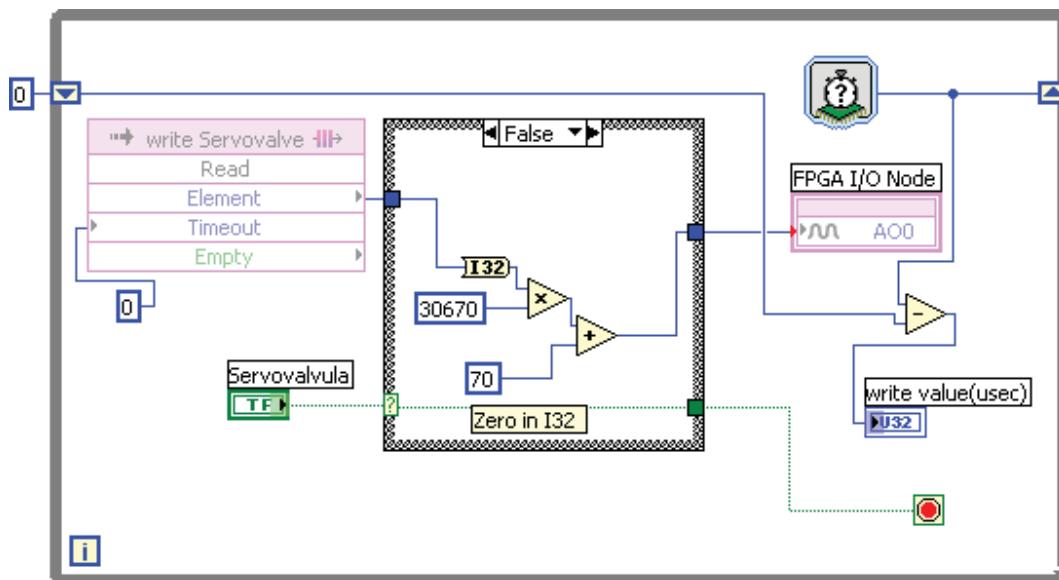
Leitura dos Canais Analógicos de Entrada 0, 1, 2



Leitura do Módulo Excitador de Strain Gages



Conversão D/A na Servo-Válvula usando somente 3 valores: máximo, mínimo ou zero



Ação que comanda a reversão da servo-válvula

