

Edson Francisco Estrada Meneses

Curriculum Vitae

Datos laborales

Cargo	Profesor - Investigador
Institución	Universidad Autónoma de Ciudad Juárez, Departamento de Ciencias de la Salud, Licenciatura de Entrenamiento Deportivo
Ciudad y País	Cd. Juárez, Chihuahua
Periodo	Agosto de 2006 - Presente
Cargo	Coordinador de la Licenciatura de Entrenamiento Deportivo
Institución	Universidad Autónoma de Ciudad Juárez, Departamento de Ciencias de la Salud, Licenciatura de Entrenamiento Deportivo
Ciudad y País	Cd. Juárez, Chihuahua
Periodo	Octubre 2011 – octubre 2012 y Octubre 2016 - Presente

Datos Académicos

Doctorado

Nombre del postgrado	Ph.D. Computer Engineering
Tesis	<i>Computer-Aided Detection of Sleep Apnea and Sleep Stage Classification using HRV and EEG Signals</i>
Fecha de obtención del grado	Diciembre 2010
Institución	Universidad de Texas en El Paso
País	Estados Unidos
Área	Procesamiento digital de señales aplicado a la biomédica, rehabilitación

Maestría

Nombre del postgrado	M.S. Kinesiology
Tesis	<i>Effects of Controlled-Whole Body Vibration Training in Improving Disability Status And Functional Mobility Among People With Multiple Sclerosis</i>
Fecha de obtención del grado	Diciembre 2016
Institución	Universidad de Texas en El Paso
País	Estados Unidos
Área	Procesamiento digital de señales aplicado a la biomédica

Maestría

Nombre del postgrado	M.S. Electrical Engineering
Tesis	<i>Feature extraction for automatic sleep classification</i>
Fecha de obtención del grado	Mayo 2005
Institución	Universidad de Texas en El Paso
País	Estados Unidos
Área	Procesamiento digital de señales aplicado a la biomédica

Licenciatura

Título	Ingeniería Electrónica
Tesis	Titulación automática
Fecha de obtención del grado	Marzo de 2002
Institución	Instituto Tecnológico de Chihuahua
País	México
Área	Sistemas digitales

Áreas de interés

- Biomecánica
- Rehabilitación (Tratamientos post-trauma)
- Procesamiento digital de señales e imágenes biomédicas
- Análisis del movimiento humano en deportes
- Kinesiología
- Telemedicina

Certificaciones

- Modelo Pedagógico Constructivista
- Educación a Distancia

Producción científica – Reciente

Yang, F., **Estrada, E. F.**, & Sanchez, M. C. (2016). Vibration training improves disability status in multiple sclerosis: A pretest-posttest pilot study. *Journal of the Neurological Sciences*, 369, 96-101.

Estrada, E., Sanchez, M. C., King, G. A., & Yang, F. (2016). Effects of Vibration Training on Disability Status among Individuals with Multiple Sclerosis. In *International Journal of Exercise Science: Conference Proceedings* (Vol. 2, No. 8, p. 71).

Sanchez, M. C., **Estrada, E.**, King, G. A., & Yang, F. (2016). Controlled Whole-body Vibration Training Reduces Risk of Falls in People with Multiple Sclerosis. In *International Journal of Exercise Science: Conference Proceedings* (Vol. 2, No. 8, p. 36).

David, K., Micah, Z., Hung-Sheng, H., Aditi, M., Steve, L., **Edson, E.**, & Gustavo, S. (2015). Evidence for the invalidity of the Wingate test for the assessment of peak power, power decrement and muscular fatigue. *Central European Journal of Sport Sciences and Medicine*, 10(2), 63-78.

Producción científica

- Barragán, J., **Estrada, E.**, Nava, P., & Nazeran, H. (2005). EEG-based classification of sleep stages using artificial neural networks. *Proceedings of the 27th International Workshop on Biomedical Signal Interpretation*, 6-8.
- Chatlapalli, S., Nazeran, H., Melarkod, V., Krishnam, R., **Estrada, E.**, Pamula, Y., & Cabrera, S. (2004). Accurate derivation of heart rate variability signal for detection of sleep disordered breathing in children. *Engineering in Medicine and Biology Society, 2004. IEMBS'04. 26th Annual International Conference of the IEEE*, 1 538-541.
- Ebrahimi, F., Mikaeili, M., **Estrada, E.**, & Nazeran, H. (2008). Automatic sleep stage classification based on EEG signals by using neural networks and wavelet packet coefficients. *Engineering in Medicine and Biology Society, 2008. EMBS 2008. 30th Annual International Conference of the IEEE*, 1151-1154.
- Estrada, E.**, Nazeran, H., Nava, P., Behbehani, K., Burk, J., & Lucas, E. (2004). EEG feature extraction for classification of sleep stages. *Engineering in Medicine and Biology Society, 2004. IEMBS'04. 26th Annual International Conference of the IEEE*, 1 196-199.
- Estrada, E.**, Nazeran, H., Barragan, J., Burk, J., Lucas, E., & Behbehani, K. (2006). Eog and emg: Two important switches in automatic sleep stage classification. *Engineering in Medicine and Biology Society, 2006. EMBS'06. 28th Annual International Conference of the IEEE*, 2458-2461.
- Estrada, E.**, Nazeran, H., Nava, P., Behbehani, K., Burk, J., & Lucas, E. (2006). Itakura distance: A useful similarity measure between EEG and EOG signals in computer-aided classification of sleep stages. *Engineering in Medicine and Biology Society, 2005. IEEE-EMBS 2005. 27th Annual International Conference of the*, 1189-1192.
- Ebrahimi, F., Mikaili, M., **Estrada, E.**, & Nazeran, H. (2007). Assessment of itakura distance as a valuable feature for computer-aided classification of sleep stages. *Engineering in Medicine and Biology Society, 2007. EMBS 2007. 29th Annual International Conference of the IEEE*, 3300-3303.
- Estrada, E.**, Nazeran, H., Behbehani, K., Burk, J., & Lucas, E. (2008). Correlation dimension analysis of simultaneous EEG and ECG signals for automated sleep stage classification. *BIOMEDICAL ENGINEERING Recent Developments*,
- Estrada, E. F.**, Nazeran, H., & Ochoa, H. (2009). HRV and EEG signal features for computer-aided detection of sleep apnea. *25th Southern Biomedical Engineering Conference 2009, 15-17 may 2009, Miami, Florida, USA*, 265-266.
- Estrada, E.**, Nazeran, H., Ebrahimi, F., & Mikaeili, M. (2009). EEG signal features for computer-aided sleep stage detection. *Neural Engineering, 2009. NER'09. 4th International IEEE/EMBS Conference on*, 669-672.
- Estrada, E.**, Nazeran, H., Ebrahimi, F., & Mikaeili, M. (2009). Symmetric itakura distance as an EEG signal feature for sleep depth determination. *ASME 2009 Summer Bioengineering Conference*, 723-724.
- Estrada, E.**, & Nazeran, H. (2010). EEG and HRV signal features for automatic sleep staging and apnea detection. *Electronics, Communications and Computer (CONIELECOMP), 2010 20th International Conference on*, 142-147.
- Estrada, E.**, Nazeran, H., Sierra, G., Ebrahimi, F., & Setarehdan, S. K. (2011). Wavelet-based EEG denoising for automatic sleep stage classification. *Electrical Communications and Computers (CONIELECOMP), 2011 21st International Conference on*, 295-298.

Hernandez, C., **Estrada, E.**, Garcia, L., Sierra, G., & Nazeran, H. (2010). Traditional sEMG fatigue indicators applied to a real-world sport functional activity: Roundhouse kick. *Electronics, Communications and Computer (CONIELECOMP), 2010 20th International Conference on*, 154-158.