Hermosillo, Sonora a 18 de octubre de 2023

Comisión Electoral Departamental
Universidad de Sonora
Presente.

El que suscribe **Dr. JOSE LUIS OCHOA HERNANDEZ**, presenta su solicitud para participar en el proceso de Selección de candidatos(as) como aspirantes a ocupar la titularidad de la Jefatura del Departamento de Ingeniería Industrial periodo 2023-2028. Adjunto encontrarán comprobantes de los requisitos solicitados para participar en este proceso de selección.

Agradezco de antemano su atención quedando a su disposición por cualquier duda o aclaración relacionada con la presente solicitud. Sin otro particular, me despido.

Dr. José Luis Ochoa Hernández
Maestro de tiempo Completo
Departamento de Ingeniería Industrial
Universidad de Sonora

Juan Carlos I, Rey de España

y en su nombre

El Rector de la Universidad de Murcia

Considerando que, conforme a las disposiciones y circunstancias prevenidas por la legislación vigente,

Don José Luis Ochoa Hernández

nacido el día 22 de febrero de 1980 en México D.F. (México), de nacionalidad mexicana,

ha superado los estudios de Doctorado en los Departamentos de Ingeniería de la Información y las Comunicaciones y de Ingeniería y Tecnología de Computadores, dentro del Programa de Nuevas Tecnologías de la Información y las Comunicaciones, en las condiciones establecidas por la legislación vigente para los poseedores de títulos extranjeros no homologados a un título español de segundo ciclo, y ha hecho constar su suficiencia en esta Universidad, con la calificación de SOBRESALIENTE "CUM LAUDE", el día 21 de junio de 2011, expide el presente título de

Doctor por la Universidad de Murcia

con carácter oficial y validez en todo el territorio nacional, que faculta al interesado para disfrutar los derechos que a este título otorgan las disposiciones vigentes.

Dado en Murcia, a 23 de junio de 2011

El interesado, — *El Rector,* — *La Jefa de Sección de Títulos,*

José Antonio Cobacho Gómez — María Belén Hernández Prada

I-BE-022369

Registro Nacional de Títulos	Código de CENTRO	Registro Universitario de Títulos
2012/028281		201101203

UNIVERSIDAD AUTONOMA DE AGUASCALIENTES

en virtud de que

José Luis Ochoa Hernández

aprobó los estudios conforme a los planes autorizados por el H. Consejo Universitario y según constancias archivadas en esta Universidad, le otorga el título de:

Ingeniero en Sistemas Computacionales

para que pueda ejercer libremente su profesión sin más limitaciones que las establecidas por la ley.

"Se Lumen Proferre"

Dado en la ciudad de Aguascalientes, Ags, el día 31 de julio del 2003.

El Secretario General

M. En Soc. José Ramiro Alemán López

El Rector

Dr. Antonio Avila Starer

Ciudad de México, 09 de diciembre de 2021
Oficio Núm. 511/2021-4089-36
Asunto: Carta de vigencia del Reconocimiento a Perfil Deseable

OCHOA HERNANDEZ JOSE LUIS
UNIVERSIDAD DE SONORA
PRESENTE

Anteponiendo un cordial saludo y de conformidad con el resultado de la evaluación realizada por académicos externos a la Secretaría de Educación Pública (SEP) señalado en el punto 8, lineamiento 3.3.2 Procedimiento de Selección, Tipo Superior, de las Reglas de Operación 2021 del Programa para el Desarrollo Profesional Docente (PRODEP), se ha dictaminado positivamente su solicitud presentada por la institución a la que se encuentra actualmente adscrita/o.

Conforme a lo anterior, la Subsecretaría de Educación Superior (SES), a través de la Dirección General de Educación Superior Universitaria e Intercultural (DGESUI), en el marco del PRODEP, Tipo Superior, le otorga el **Reconocimiento como Profesora/or de tiempo completo con Perfil Deseable,** por un período de **3 años** contados a partir del 15 de diciembre del año en curso, siempre y cuando, durante el periodo de vigencia indicado continúe laborando en la actual institución que la/lo promovió.

Sin otro particular, me reitero a sus apreciables órdenes.

Atentamente

Dra. Carmen Enedina Rodríguez Armenta
Directora General

S. E. P.
DIRECCIÓN GENERAL DE EDUCACIÓN SUPERIOR UNIVERSITARIA E INTERCULTURAL

C.c.p. Dra. María Rita Plancarte Martínez, Rectora, Universidad de Sonora– Para su conocimiento.

"Este programa es público, ajeno a cualquier partido político. Queda prohibido el uso para fines distintos a los establecidos en el programa."

Av. Universidad No. 1200, Piso 5, Sector 28, Col. Xoco, C.P. 03330, CDMX.
Tel: +52 (55)3601 3331 y 3332 dgesui.ses.sep.gob.mx

México 2021 Año de la Independencia

Ph.D. José Luis Ochoa Hernández

Computer Science specialized in the NLP area

Full professor at the Sonora University (Mexico)

as professor-researcher

EXECUTIVE SUMMARY

Currently I am a full professor at the Sonora University (Mexico) as professor-researcher, (recognized as SNI C, by CONACYT) within the Information Systems Engineering Bachelor's program, in which I teach classes focused on courses related to Software Engineering. I also teach classes in the master's degree in Systems and Technology program. In collaboration we have reviewed the complete Information Systems program (ISI), Creator of Bachelor's and Master's courses, every year I take various training courses in teacher education, create and update teaching materials every semester, creator of the Meeting "University - Company in ISI" with 10 editions. I have been recognized as a distinguished professor in 2018 for his academic career. My area of research is the NLP and Knowledge Management, where I have published some articles in international magazines such as "Expert systems with applications", "Scientific Research and Essays", "Educational Research and Reviews" y "Int. Journal of Physical Science", among others.

CONTACT

Celta Pte, No. 30, El Esplendor 3,
Hermosillo, Sonora, México, 83175.

011 52 (662) 257-7206

joseluis.ochoa@unison.mx

W1: buhos.uson.mx
W2: investigadores.unison.mx

PERSONAL REFERENCES

- Ph.D. Mario Barceló Valenzuela, Sonora University, 011 52 (662) 142-0427, mario.barcelo@unison.mx
- Ph.D. Rafael Valencia García, Murcia University, 011 33 (), valencia@um.es
- Ph. D. Guzmán Gerardo Alfonso Sánchez Schmitz, Sonora University, 011 52 (662) 181-2290, gerardo.sanchez@unison.mx
- Ph.D. Alonso Pérez Soltero, Sonora University, 011 52 (662) 155-6882, alonso.perez@unison.mx

PERSONAL SKILLS

	Min 1 – Max 5
Flexibility / adaptability	4
Communicative skills	4
Ability to solve problems	4
Creative / innovative	4
Positive attitude	5
Trust	5
Honest	5
Growth potential	5
Working man	5
Family Person	5

PROFESSIONAL ACHIEVEMENTS

- CONACYT SIN C (National Researcher Candidate) recognition for 5 years.
- Recognition PRODEP (Program for Teacher Professional Development) Level 6 of 7 for more than 9 years.
- Recognized as a distinguished professor in 2018 for his academic career at UniSon.

RELEVANT EXPERIENCE

- Professor - researcher for more than 9 years at the Sonora University as full professor.
- Taught more than 36 undergraduate courses (15 of them different) and more than 10 master's courses, (3 of them different) face-to-face, online and outline.
- Bachelor's program coordinator from 2012 to 2016.
- Coordinator of 3 research projects with national funds:
  - (2013-2014) Methodology for the knowledge acquisition in a university environment, $284,637.00 mx pesos.
  - (2014) Automated system with the use of renewable energy for the production of

ecological and sustainable substitutes for raw materials based on recycled glass, $1,250.00 mx pesos.

- (2015) Design and construction of a technological platform for the production of stone aggregates of clean recycled glass, through the renewable use of photovoltaic solar energy and reuse of wastewater $995,900.00 mx pesos.

- Coordinator (2012-2020) Organizer of the event Meeting "University - Company in ISI", for more than 9 years. With regional, national and international speakers.

SCHOOL BACKGROUND

- Doctoral studies in New Information and Communication Technologies area, with the thesis, *Development of a methodology for the automatic ontologies construction in Spanish from free text.* 2011, Murcia University, working in the NLP area.

- Advanced Studies Diploma (ASD) (Pre-doctorate), 2005-2006, Murcia University.

- Computer Systems Engineer 1998-2003, Autonomous Aguascalientes University.

COMPLEMENTARY BACKGROUND

2020
- Microsoft Teams Certified: Organize groups and manage resources in the classroom, imparted by Microsoft México, (60 hrs).
- Course "Didactic strategies for higher education", imparted by Educational Innovation Directorate, UNISON.
- Course "Information Management And Application Development In Microsoft 365", imparted by Engineering Division, UNISON.
- Course "Inclusion and disability", imparted by Student Services Directorate, UNISON.
- Course "All about preventing COVID-19", imparted by IMSS.

2019
- Workshop "Editorial management with Open Journal System" imparted by Research and postgraduate management, UNISON.
- Workshop "Machine Learning with python", imparted by Engineering Division, UNISON.
- Course "Preparation of reagents" imparted by Educational Innovation Directorate, UNISON.
- Course "Mental health in college students", imparted by Student Services Directorate, UNISON.

2018
- Course "Engineering costs", imparted by Engineering Division, UNISON.
- Course "Competency assessment" imparted by Educational Innovation Directorate, UNISON.
- Course "University Social Responsibility" imparted by Educational Innovation Directorate, UNISON.
- Course "Psychological problems linked to academic performance" imparted by Student Services Directorate, UNISON.

2017
- Course "Entrepreneurial Culture in the classroom", imparted by Educational Innovation Directorate, UNISON.

PROFESSIONAL EXPERIENCE (relevant)

- **SONORA UNIVERSITY – Central Campus,** Full-Time Professor in the Information Systems Engineering Bachelor program, from 2011-2 at today.
  Activities: I am currently the president of the Information Technology academy. Preparation / updating of teaching material for the classes. Tutoring students. Guide students in undergraduate projects, Jury in undergraduate competitions. Research project reviewer. In charge of some internal projects to improve the bachelor program. Teach classes in the master's and bachelor's degrees. Participation with conferences within the university. Take training courses. Participation in collaborative projects.
  Regarding research: Research Tasks. Article writing task. Collaborate in the work team investigation. Article reviewer. Member of editorial committees. Guide students in master's projects. Guide students in publishing their articles.

- **SONORA UNIVERSITY – Central Campus,** Information Systems Engineering Program Coordinator, from 2012-2 to 2016-2.
  Activities: Coordinate the program properly. orient students academically, in your life plan, in your career plan, in both national and foreign mobility programs, in scholarships, health programs, medical, etc. Coordinate training and certification courses for students. Promote self-learning, entrepreneurship, motivate high school students to enter the ISI program, follow and collaborate with the UNISON tutorial Action plan, motivates to participate in events such as the Engineering Cultural Week and the Meeting "University - Company in ISI", invite companies to participate in internship programs, visit companies, etc.

PUBLICATIONS

2020

- Pérez-Soltero, A., Salcido-Flores, R., **Ochoa-Hernández, J.**, & López-Muñoz, M. (2020). **A Strategy based on knowledge management to identify and take advantage of the knowledge acquired through training.** *Administración Y Organizaciones*, *23*(45), 54-68. https://doi.org/10.24275/uam/xoc/dcsh/rayo/2020v23n45/Perez

2019

- Perez-Soltero, Alonso and Salcido-Flores, Rosalva and **Ochoa-Hernández, José Luis** and Barcelo-Valenzuela, Mario and Sanchez-Schmitz, Gerardo and Lopez-Muñoz, Miguel Enrique, **A Methodological Proposal to Manage Knowledge in the Organization of School Events** (2019). The IUP Journal of Knowledge Management, Vol. XVII, No. 3, July 2019, pp. 19-43, Available at SSRN: https://ssrn.com/abstract=3653971

- Talamante-Lugo, Emilio, Felix-Moreno, Jose Luis, Feuchter-Leyva, Carlos Ignacio, Sanchez-Schmitz, Gerardo, **Ochoa-Hernandez, Jose Luis**, & Romero-Dessens, Luis Felipe. (2019). **Use of Storage Technologies to select Knowledge Management Tools and Strategies for M-SMEs**. Ingeniare. Chilean engineering magazine, 27(3), 421-430. https://dx.doi.org/10.4067/S0718-33052019000300421

- Castro Navarro, E.A.; **Ochoa Hernandez, J.L.**; Sánchez Schmitz, G. "**A proposal for the identification of young people at risk of dropping out of school with data mining tools.**", Proceedings of the IV International Congress on Supply Chain Management in a Global Economy, Lima, Perú. Sept. 9-10, 2019.

- Barceló Valenzuela, M.; Rodríguez Domínguez, M.; **Ochoa Hernandez, J.L.** "A proposal to validate the human capital competencies of a Mexican food SME", Proceedings of the IV International Congress on Supply Chain Management in a Global Economy, Lima, Perú. Sept. 9-10, 2019.

2018

- **Ochoa-Hernández J.L.**, Barcelo-Valenzuela M., Sanchez-Smitz G., Torres-Peralta R. (2018) **Concept Identification from Single-Documents.** In: Valencia-García R., Alcaraz-Mármol G., Del Cioppo-Morstadt J., Vera-Lucio N., Bucaram-Leverone M. (eds) Technologies and Innovation. CITI 2018. Communications in Computer and Information Science, vol 883. Springer, Cham. https://doi.org/10.1007/978-3-030-00940-3_12

- **Ochoa-Hernández, José Luis**, Barcelo-Valenzuela, Mario, Cirett-Galán, Federico Miguel, & Luque-Morales, Ramón Alberto. (2018). **A Model to Develop SCADA Systems in Productive Environments.** *Computación y Sistemas*, *22*(4), 1543-1558. Epub February 10, 2021.https://doi.org/10.13053/cys-22-4-2823

- Mario Barcelo-Valenzuela, Edlyn Hernandez-Rojas, Alonso Perez-Soltero, **José Luis Ochoa-Hernández**, "**A CRM Strategy for Integrating Customer Knowledge**", IUP Journal of Knowledge Management, Vol. 16, No. 4, pp. 7-28, ISSN: 0972-9216, 2018.

- Ibarra Salazar, J. R., Romero Dessens, L. F., Torres Peralta, R., Cirett Galan, F. M., & **Ochoa Hernández, J. L.** (2017). **Tire wear analysis of cargo trucks.** *EPISTEMUS*, *12*(24), 69–77. https://doi.org/10.36790/epistemus.v12i24.70

- Rosalva Salcido-Flores, Alonso Perez-Soltero, **Jose Luis Ochoa-Hernandez**, Mario Barcelo-Valenzuela, Gerardo Sanchez-Schmitz "**A proposal to manage knowledge in school events: an approach based on metadata and documented libraries**", Proceedings of the III International Congress on Supply Chain Management in a Global Economy, Bogotá, Colombia. Oct 29-30, 2018.

2017

- Noguera-Arnaldos J.Á., Paredes-Valverde M.A., Salas-Zárate M.P., Rodríguez-García M.Á., Valencia-García R., **Ochoa J.L.** (2017) **im4Things: An Ontology-Based Natural Language Interface for Controlling Devices in the Internet of Things.** In: Alor-Hernández G., Valencia-García R. (eds) Current Trends on Knowledge-Based Systems. Intelligent Systems Reference Library, vol 120. Springer, Cham. https://doi.org/10.1007/978-3-319-51905-0_1

- Stephania Corral-Escobosa, Alonso Perez-Soltero, **Jose Luis Ochoa-Hernandez**, Mario Barcelo Valenzuela, "**Methodology for the Identification and Documentation of the Knowledge of Key Processes in Knowledge-Intensive Service Companies**", Proceedings of the VI Ibero-American Congress on Operations Research and Management Sciences (IOCA 2017), Barranquilla, Colombia, pp. 80-87, March 21-23, 2017.

- See more at the end.

CONFERENCES:

2019

- José Luis Ochoa Hernández. **"relax, if you**

know English and programming, You're ready…". Within the 9th Meeting "University - Company in ISI", October 2019, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. "PLN en el mundo" (*NLP in the world*)**.** Within the Cultural Engineering Week XVII, November 2019, Hermosillo, Sonora, Mexico.

2018

- José Luis Ochoa Hernández. "Los trabajos que desaparecerán con las nuevas tecnologías" (*Jobs that will disappear with new technologies*). Within the 8th Meeting "University - Company in ISI", October 2018, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. "Tecnología del lenguaje Natural" (*Natural Language Technology*)**.** Within the Cultural Engineering Week XVI, November 2018, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. "Usos y aplicaciones del Procesamiento del lenguaje natural en nuestros días" (*Uses and applications of Natural Language Processing today*) Within the 1st National Congress of Engineering, November 2018, Hermosillo, Sonora, Mexico.

2017

- José Luis Ochoa Hernández. "PLN en las empresas" (*NLP in the companies*). Within the 7th Meeting "University - Company in ISI", October 2017, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández, Raquel Torres Peralta and Miguel Federico Cirett Galán. "El resurgimiento de la inteligencia artificial" (*The resurgence of artificial intelligence*)**.** Within the International Engineering Symposium "AXIS Transforma 2017", March 2017, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. "Aplicaciones del PLN" (*NLP Applications*)**.** Within the Cultural Engineering Week XV, November 2017, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. "Impacto del Procesamiento del Lenguaje Natural en la sociedad" (*Impact of Natural Language Processing on society*)**.** Within the Meeting of academic bodies of systems and artificial intelligence, November 2017, Hermosillo, Sonora, Mexico.

- See more at the end.

POSTERS

2019

- Durán López, C.; Ochoa Hernandez, J.L.; Barceló Valenzuela, M. Planning a methodology for the implementation of livestock strategies. "Avances de Investigación en Ingeniería en el Estado de Sonora" (AVIIES - 2019).

- See more at the end.

TECHNICAL REPORTS

- Final Project Report 220091 "**DESIGN AND CONSTRUCTION OF A TECHNOLOGICAL PLATFORM FOR THE PRODUCTION OF STONE AGGREGATES OF CLEAN RECYCLED GLASS, THROUGH THE RENEWABLE USE OF PHOTOVOLTAIC SOLAR ENERGY AND REUSE OF WASTEWATER**", Incentive Program for Research, Technological Development and Innovation (Proinnova) 2015.

- Final Project Report 213204 "**SISTEMA AUTOMATIZADO CON APROVECHAMIENTO DE ENERGÍA RENOVABLE PARA LA PRODUCCIÓN DE SUSTITUTOS ECOLOGICOS Y SUSTENTABLES DE MATERIAS PRIMAS A BASE DE VIDRIO RECICLADO**", Incentive Program for Research, Technological Development and Innovation (Proinnova) 2014.

- Final report of the institutional consolidation project for repatriation, Sonora University / CONACYT, **METHODOLOGY FOR THE KNOWLEDGE ACQUISITION IN A UNIVERSITY ENVIRONMENT**. José Luis Ochoa Hernández (Principal) Gerardo Sánchez Schmitz, Mario Barceló Valenzuela, Alonso Pérez Soltero, René Franco Navarro, Pags. 36. 24/08/2012.

PARTICIPATION IN PROJECTS WITH FUNDS:

- **Calling entity:** CONACYT, Call for PROINNOVA Funds 2015
  Title: Design and construction of a technological platform for the production of stone aggregates of clean recycled glass, through the renewable use of photovoltaic solar energy and reuse of wastewater
  File No.: 220091
  Headline: Dr. José Luis Ochoa Hernández
  Collaboration with the Company: INTEPPCO S.A. DE C.V.
  Approved amount: $7,169,248.00
  Project duration: 01/January/2015 – 31/December/2015

- **Calling entity:** CONACYT, Call for PROINNOVA Funds 2014
  Title: Automated system with the use of renewable energy for the production of ecological and sustainable substitutes for raw materials based on recycled glass
  File No.: 213204
  Headline: Dr. José Luis Ochoa Hernández
  Collaboration with the Company: INTEPPCO S.A. DE C.V.
  Approved amount: $6,891,655.00
  Project duration: 01/January/2014 – 31/December/2014

- **Calling entity:** CONACYT (National Council of Science and Technology), First Period of the 2011 Call of the Program *"Complementary Supports for the Institutional Consolidation of Research Groups" in the Repatriation modality.*
  File No.: 000000000168341
  Title: METHODOLOGY FOR THE KNOWLEDGE ACQUISITION IN A UNIVERSITY ENVIRONMENT
  Project duration: 01/September/2011 – 31/August/2012
  Financed: Yes.

- See more at the end.

RECOGNITIONS

- Annual Distinguished Professor Award for academic career 2017-2018.

EVENT ORGANIZATION

- Founder of the Meeting "University - Company in ISI" which aims to link the industry with the ISI program.
- Responsible Organizer for the Meeting "University - Company in ISI" from 2011 to 2021.

LANGUAGES

My native language is the Spanish and I learn with the time the English language.

Language	Written Level	Spoken Level	Comprehension Level	Obtained title
English	*Medium Level*	*Medium Level*	*Medium Level*	TOEFL

COMPUTING

- **Administrative Software:** Microsoft Software, Open Office, Google Tools, Dropbox, Acrobat, Trello, LimeSurvey, etc.
- **Operating Systems:** Linux (Fedora X), Windows, MAC OS
- **Programming Languages:** Java, J2EE, JSP, MyFaces, DWR, HTML, Visual Basic, Delphi, Pascal, Cobol, C++.
- **Application Server:** JBoss X, Tomcat X
- **Data bases:** Oracle, PostgreSQL, MySQL, SQL, Access
- **Design:** Photoshop CS4, Corel Draw Suit X4, Autocad 10, Dream Weaver CS4, Flash CS4, Gif Movie Gear
- **Internet**
- among others…

LABORAL INTERESTS

- Great interest in expanding my knowledge in the educational and technological area
- Orient all my computer science knowledge area to education and research
- Contribute with all my ideas to the development of new methods and techniques to educational teaching
- Putting most of these ideas into practice that will make the most of teaching and technological methods
- Academic-Training Availability
- increase my number of annual publications, without losing the quality of the works

PERSONAL INTERESTS

- Improve Life Quality
- Enjoy nature
- Enjoy the days with the family
- Enjoy the photography
- To be a better person every day

PROFESSIONAL EXPERIENCE (the rest…)

- **L'Academia – Opposition Center and Training courses,** Computer Science Professor in the Personnel Administration area, 2010-2011.
  Activities: Preparation and teaching of classes on various computer topics such as: computer components, operating systems, office automation (Word, Excel, Power Point, Access, OutLook).

- **Climent – Training center,** Professor of Advanced Computer Science in the Personnel Administration area for the Autonomous Community of the Region of Murcia (CARM), 2010 - 2010
  Activities: Teaching of Word 2003 and Excel 2003 classes in advanced mode.

- **L'Academia – Opposition Center and Training courses,** Computer Science Professor in the Personnel Administration area, 2009-2010.
  Activities: Preparation and teaching of classes on various computer topics such as: computer components, operating systems, office automation (Word, Excel, Power Point, Access, OutLook).

- **IMET – Intelligent Metodologies,** Systems Analyst and Software Projects - Database Administrator - WEB Developer, 2006-2009.
  Activities: Systems Analyst and Software Projects, Databases and Products, Head of the Development team in the medical area and Bioclimatism, Developer of J2EE Applications oriented to the Bioclimatic and Oncological area Development of Websites with Joomla 1.X technology, Corporate Image of Websites, Assistance to the End User in the different products developed. Database Administration (Oracle, Postgres, MySQL, Access) JBoss and Tomcat Application Server, Computer Equipment Management.

- **FUNDESOCO - Foundation for Research and Technological Development of the Knowledge Society,** Researcher, Systems Analyst and Developer, 2005- 2006.
  Activities: Knowledge Management Research for the Oncology area, Oncology Systems and Software Project Analyst, Developer of J2EE Applications oriented to the Oncology area, Computer Equipment Management.

- **UMU - University of Murcia,** Researcher, Systems Analyst and Developer, 2004 a 2005
  Activities: Research in Natural Language Processing Methodologies and Knowledge Acquisition, Software and Systems Project Analyst, JBuilder Application Developer, MySql Database Administration.

COMPLEMENTARY BACKGROUND (the rest…)

2016
- Course "Internet searches", imparted by Educational Innovation Directorate, UNISON.
- Course "special probability distributions and statistics with Matlab", imparted by Engineering Division, UNISON.
- Course "Photography as a teaching tool", imparted by Educational Innovation Directorate, UNISON.

2015
- Course "Defeat violence and build respect: bullying prevention", imparted by Student Services Directorate, UNISON.

2014
- Course "Distance thematic programs design", imparted by Educational Innovation Directorate, UNISON.
- Course "Enabling Online Advisors", imparted by Educational Innovation Directorate, UNISON.

2013
- Course "Learning Assessment", imparted by Educational Innovation Directorate, UNISON.
- Course "Intelligent Control Applied to Processes", imparted by the Industrial Engineering Department, UNISON.
- Course "Classification and Data Mining Techniques", imparted by the Industrial Engineering Department, UNISON.

- Course “Image processing”, imparted by the Industrial Engineering Department, UNISON.

2011

- Course “Monitoring of school tracks and implications for tutorial action”, imparted by DAcIE (Platform for Training and Education), UNISON.

2008

- Course “QUALITY ISO 9001”, imparted by Regional Confederation of Business Organizations of Murcia.
- Course “HL7 INTEROPERABILITY” (Pre-certification HL7 V2.x & Clinical Document Architecture CDA r2) by HL7 Spain & IMET.

2007

- Course “HL7 INTEROPERABILITY” (Pre-certification in the HL7 health information interoperability standard v2.5), by HL7 Spain & IMET.

PUBLICATIONS (the rest…)

2015

- Noguera-Arnaldos J.Á., Rodriguez-García M.Á., **Ochoa J.L.**, Paredes-Valverde M.A., Alcaraz-Mármol G., Valencia-García R. (2015) **Ontology-Driven Instant Messaging-Based Dialogue System for Device Control.** In: Ciuciu I. et al. (eds) On the Move to Meaningful Internet Systems: OTM 2015 Workshops. OTM 2015. Lecture Notes in Computer Science, vol 9416. Springer, Cham. https://doi.org/10.1007/978-3-319-26138-6_33

2014

- Alonso Perez-Soltero**,** Ana Gabriel Zavala Guerrero, Mario Barcelo-Valenzuela, **José Luis Ochoa Hernández**, **"Una Propuesta Metodológica para Implementar una Estrategia de Gestión del Conocimiento en Empresa Comercializadora"**, AcademiaJournals, Vol. 6, No. 2, pp. 707-712, ISSN 1946-5351(Online), Mexico, 2014.

2013

- **José Luis Ochoa**, Rafael Valencia-García, Alonso Perez-Soltero, Mario Barceló-Valenzuela, **"A Semantic Role Labelling-Based Framework for Learning Ontologies from Spanish Documents"**, Expert Systems with Applications, Vol. 40, No. 6, pp. 2058-2068, ISSN: 0957-4174, 2013.

- Alonso Perez-Soltero**,** Leonardo Ernesto Llanes-Hoyos, Mario Barcelo-Valenzuela, **José Luis Ochoa-Hernández**, **"Aplicación de Tecnologías de Información para el Desarrollo de una Memoria Organizacional: Caso KM Solución"**, Memorias del VI Simposio Internacional de Ingeniería Industrial: Actualidad y Nuevas Tendencias 2013 (VISIII 2013), pp. 439-451, ISSN: 1856-8343, Bogotá, Colombia, Jul 24-26, 2013.

2012

- **José Luis Ochoa**, Gerardo Sánchez Schmitz, Alonso Perez-Soltero, Rafael Valencia-García. (2012). **Una herramienta que emplea el Procesamiento del Lenguaje Natural aplicado a la extracción de conocimiento en cualquier dominio.** Epistemus, Vol.13, Pag.44-50, Hermosillo, Sonora. 2012.

- Alonso Perez-Soltero, Leonardo Ernesto Llanes Hoyos, Mario Barcelo Valenzuela, Heriberto Aja Leyva, **José Luis Ochoa**, "Captura y Utilización del Conocimiento Basado en un Modelo Conceptual de una Memoria Organizacional: Caso KMSolución" in: Avances de Investigación en Ingeniería en el Estado de Sonora, Volumen 2, pp. 217-224, ISBN 978-0-578-11278-7, 2012.

- Mario Barceló-Valenzuela, **José Luis Ochoa-Hernández**, Gerardo Sánchez-Schmitz, Jorge Abraham Martínez Ibáñez. (2012). Un diagnóstico del uso de las Redes Sociales en las empresas de Hermosillo, Sonora. Avances de Investigación en Ingeniería en el Estado de Sonora, Vol.2, Pag.232-241, ISBN 978-0-578-11278-7. Hermosillo, Sonora 2012.

2011

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- **José Luis Ochoa**, Maria Luisa Hernandez-Alcaraz, Ángela Almela and Rafael Valencia-Garcia, (2011a). **Learning Semantic Relations from Spanish Natural Language Documents in the Financial Domain**, ICCMS 2011, Mumbai, India.

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- José Luis Ochoa Hernández. "Sistema Informático SCADA para pulimiento de vidrio" (*SCADA Computer System for glass polishing*)**.** Within the Cultural Engineering Week XIV, November 2016, Hermosillo, Sonora, Mexico.

2015

- José Luis Ochoa Hernández. "Capital Humano Excelente en el desarrollo de proyectos en la industria" (*Excellent Human Capital in the development of projects in the industry*)**.** Within the Cultural Engineering Week XIII, November 2015, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. "Sistema Automatizado para la producción de sustitutos ecológicos a base de vidrio reciclado con energía renovable" (*Automated system for the production of ecological substitutes based on recycled glass with renewable energy*)**.** Within the 1st Engineering Software week, April 2015, Hermosillo, Sonora, Mexico.

2014

- José Luis Ochoa Hernández, Miguel Ángel Romero Ochoa, Jorge Franco Romero Aguilar, Gustavo Ozuna Huerta. "Sistema de Control y Automatización de Reciclado de Vidrio en Caborca." (*Glass Recycling Automation and Control System in Caborca*). Within the Cultural Engineering Week XII, November 2014, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. Inteligencia Artificial para la Sociedad**.** *(Artificial Intelligence for Society)* Within the Cultural Engineering Week XII, November 2014, Hermosillo, Sonora, Mexico.

- José Luis Ochoa Hernández. Creación de un portal web de fomento al turismo rural. *(Creation of a web portal to promote rural tourism)*. Within the first state meeting of sustainable rural tourism,

September 2014, Hermosillo, Sonora, Mexico.

2012

- José Luis Ochoa Hernández. Inteligencia Artificial, algo más que robots. *(Artificial Intelligence, something more than robots)*. Within of the Artificial Intelligence Conference Program, April 2012, Hermosillo, Sonora.

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- José Luis Ochoa Hernández. Adquisición de conocimiento a partir de lenguaje natural. *(Knowledge acquisition from natural language)* Within the Cultural Engineering Week IX, November 2011, Hermosillo, Sonora.

POSTERS (the rest…):

2007

- Ochoa Hernández, J.L. et al. Collaboration in the Methodology for the "Management of Electronic Medical Records". XI Congreso Nacional de Informática Médica, Murcia, Spain, 2007, Spanish Society of Health Informatics (SEIS)

2006

- Ochoa Hernandez, et al. Collaboration in the Methodology for the "Process for the Acquisition of Medical Knowledge", X Congreso Nacional de Informática Médica, Murcia, Spain, 2006, Spanish Society of Health Informatics (SEIS)

2004

- Ochoa Hernández et. al. Development of the Methodology for the System of "Training of Psychopathological Exploration Skills through Intelligent Agents", 3er Congreso Internacional "Docencia Universitaria e Innovación", Gerona, Spain, 2004, Department of Personality, Evaluation and Psychological Treatment.

PARTICIPATION IN PROJECTS WITH FUNDS (the rest):

- **Calling entity:** MINISTRY OF INDUSTRY, TOURISM AND COMMERCE, Call for proposals
  PLAN AVANZA R + D 2008
  File No.: TSI-020100-2008-577
  Title: Universal integration engine for Advanced sanitary applications - MIURAS II (2nd and 3rd year project request)
  Project duration: 1/July/2008 – 30/June/2009

- **Calling entity:** MINISTRY OF INDUSTRY, TOURISM AND COMMERCE, Call for proposals
  PROFIT 2007
  File No.: 350300-2007-31
  Title: Universal integration engine for sanitary applications - MIURAS I
  Project duration: 1/January/2007 – 30/June/2008

- **Calling entity:** MINISTRY OF EDUCATION AND SCIENCE, Torres Quevedo Program
  File No.: PQT 06-02-0498
  Title: Feasibility study on a generic integration module for healthcare applications

Project duration: three years to be financed annually from the date of the final Resolution.

- **Calling entity:** MINISTRY OF INDUSTRY, TOURISM AND COMMERCE, Call for proposals PROFIT 2006
  File No.: 300100-2006-66
  Title: System based on knowledge management for the allocation of treatments in breast cancer II.
  Project duration: 1/January/2006 – 30/June/2007

- **Calling entity:** MINISTRY OF INDUSTRY, TOURISM AND COMMERCE, Call for proposals PROFIT 2005
  File No.: 300100-2005-65
  Title: System based on knowledge management for the allocation of treatments in breast cancer I
  Project duration: 1/January/2005 – 31/December/2005

- **Calling entity:** Development Institute, INNOVATION PROGRAM 2005, Call BORM, January 22, 2005
  File No.: 2005.03.IDIC.0114
  Title: Software platform based on advanced communication and communication technologies.
  Project duration: 1/May/2005 – 1/March/2007

- **Calling entity:** CENTER OF INDUSTRIAL TECHNOLOGY DEVELOPMENT, NEOTEC Call 2005
  File No.: 2004-0675
  Title: Smart technologies for medical software
  Project duration: 1/Januaery/2005 – 30/June/2006

- **Title:** Knowledge Management Technologies for Organizations
  Financing entity: European Comision (Alfa Program)
  Participating Entities: University of Murcia (Spain), Colegio de San Luis (Mexico), Autonomous University of Aguascalientes (Mexico), University of Aachen-RTWH (Germany), University of Donau (Austria), University of the Andes (Venezuela), University of Sao Paulo (Brazil), Bolivian Catholic University (Bolivia), University of Holguin (Cuba).
  Project duration: From: 2003 to: 2005, My participation in this project was from March 2004 to August 2005.
  Headline: Dr. Rodrigo Martínez Béjar

- **Title:** "Platform Based on Semantic Web technologies for the management of standardized federated electronic medical records"- (TSI2004-06475-c02-01+ TSI2004-06475-c02-01)
  Financing entity: National Program of the Plan for Scientific Research, Development and Technological Innovation
  Participating Entities: University of Murcia and Polytechnic University of Valencia
  Project duration: 13/December/2005 - 12/December/2007
  Global Holder: Montserrat Robles Viejo y Subproyect: Jesualdo Tomas Fernández Breis

RECOGNITIONS

- Annual Distinguished Professor Award for academic career 2017-2018.

EVENT ORGANIZATION

- Founder of the Meeting "University - Company in ISI" which aims to link the industry with the ISI program.
- Responsible Organizer for the Meeting "University - Company in ISI" from 2011 to 2021.

LANGUAGES

My native language is the Spanish and I learn with the time the English language.

Idioma	Nivel Escrito	Nivel Hablado	Nivel Comprensión	Titulo Obtenido
English	*Medium Level*	*Medium Level*	*Medium Level*	TOEFL
French	-	-	*very basic level*	-
Portuguese	-	-	*very basic level*	-

- **TOEFL ITP CERTIFICATION EXAM** in Sonora University, Mexico, 2018.
- **TOEFL CERTIFICATION EXAM** in European University of Madrid, 2005.

Thanks for reading…

Plan de trabajo

Situación actual

Se cuenta con un departamento que ha ido mejorando año con año, en el periodo del Dr. Guillermo Cuamea, se lograron avances de infraestructura, dirección de proyectos, acreditaciones, integración de nuevos profesores al SIN y al PRODEP. Hacen falta desde mi perspectiva mayor vinculación con la industria y mayor colaboración externa, laboratorios de tecnología informática, vinculación con universidades nacionales e internacionales y colaboración con proyectos de interés nacional.

Algunos datos del departamento

Según la web de investigadores del departamento de ingeniería industrial [1] se cuenta con 30 Perfiles, 17 proyectos de Investigación y 275 publicaciones, elemento que no está actualizado. La Facultad Interdisciplinaria de ingeniería proporciono datos y menciona que existen de 2020 a la fecha 47 proyectos de investigación, (aplicada (37), básica (2), desarrollo experimental (6)). También se mencionó que existen 85 actividades registradas en el SIGEAA, entre ellas Elaboración de material didáctico con nuevas tecnologías e impartición de cursos o diplomados con mayor índice de repetición.

En la web Dadip 2018 [2] se menciona que el Departamento de Ingeniería Industrial cuenta con 5 mujeres en el SIN, 21 hombres, e total 26, de los cuales 11 tienen nivel Candidato, 13 nivel 1, 1 nivel 2 y 1 nivel 3 y en una versión actualizada de 2022 [3] se tienen 83 académicos miembros del SIN 31 Hombres y 52 Mujeres.

En la web de planeación [4] se menciona que existen 35 MTC, 12 PITC, 7 TA y 57 MA dando un total de 111 profesores en el Departamento de Ingeniería industrial.

La información proporcionada por la secretaria académica del departamento [5] comenta que somos un total de 76 maestros indeterminados (44 MTCI, 26 MHSI y 6 TAI).

Se tienen 9 academias con los temas de [6] Industria, innovación e Infraestructura, Producción y consumo responsables, Sistemas socio-ecológicos y sustentabilidad, Energías y cambio climático y Energía asequible y no contaminante.

Sobre los planes de estudio de los programas del departamento, considero que los 3 programas están actualizados y que se actualizan constantemente según el organismo acreditador CACEI (IIS y IME) y CONAIC para el caso de ISI. Cada programa se actualiza en base a las necesidades de la industria.

Considerando estos datos y situaciones, de manera general, me gustaría expresar el plan de trabajo con el cual quiero que estos 5 años que dure el periodo, se pueda trabajar en equipo y colaboración con todo el personal docente, administrativo y de

servicio para lograr los objetivos planteados, donde todos nos veamos beneficiados por lograr una buena ejecución de las actividades. Para ello, es necesario conocer a los involucrados y con ello organizarse para salir adelante. Entonces…

Propuestas

Para el personal Académico

A. Escuchar las inquietudes, solicitudes y propuestas de los profesores del departamento, en reuniones personales o grupales o por sistema.
B. Estructurar y organizar las inquietudes, solicitudes y propuestas.
C. Dar a conocer las inquietudes, solicitudes y propuestas para organizar y planificar y empezar a trabajar en ellas.
D. Fomentar la elaboración de proyectos con la industria y con Conahcyt para vincular a los profesores de manera interna y con otras universidades de manera externa.
E. Crear una comisión de todos los programas para fomentar la vinculación con empresas.
F. Fomentar la creación de la Sociedad de alumnos de los programas que no la tengan.
G. Evaluación real de los maestros vía un formulario web 2 veces al semestre para que se impartan los temarios como son especificados.
H. Creación de un mini directorio de los profesores (CV) con sus líneas de investigación, gustos profesionales para que todos los conozcamos y podamos trabajar en equipos en proyectos.
I. Estar al pendiente de las instalaciones del departamento a través de un sistema de seguimiento de quejas y solicitudes para darles atención a la brevedad.
J. Apoyar a todos los maestros en sus proyectos académicos y necesidades.
K. Ampliar la opción de impartición de cursos de capacitación disciplinar a empresas del sector considerando a todas las academias.

Para los Estudiantes

A. Estar abierto a todos los estudiantes para que expresen sus inquietudes y necesidades en la universidad.
B. Tener una comisión de todos los programas para fomentar la vinculación con empresas, promocionar las ofertas de empleo y prácticas profesionales.
C. Crear un formulario / sistema de registro de los candidatos recién egresados o que quieran trabajar a tiempo parcial (estudiantes) / o que quieran hacer sus prácticas profesionales para vincularlos directamente.
D. Crear una comisión de todos los programas para fomentar la vinculación con empresas y promocionar las ofertas de empleo a través de una web con candidatos internos para cubrir esos puestos.

E. Fomentar la creación de la Sociedad de alumnos de los programas que no la tengan.
F. Evaluación real de los maestros vía un formulario web 2 veces al semestre para verificar el cumplimiento de los planes de estudio.
G. Estar al pendiente de las instalaciones del departamento a través de un sistema de seguimiento de quejas y solicitudes para darles atención a la brevedad.
H. Apoyar a todos los estudiantes en sus proyectos académicos y necesidades (en medida de lo posible).

Para el personal Administrativo y de servicio...

A. Escuchar las inquietudes, solicitudes y propuestas del personal del departamento, en reuniones personales o grupales y por sistema.
B. Estructurar y organizar las inquietudes, solicitudes y propuestas.
C. Dar a conocer las inquietudes, solicitudes y propuestas para organizar y planificar y empezar a trabajar en ellas.

Por último, cumplir con las Actividades del jefe de departamento descritas en LEY NÚMERO 169, ORGÁNICA DE LA UNIVERSIDAD DE SONORA [7].

Referencias

[1] Consultada en Octubre de 2023. https://investigadores.unison.mx/es/organisations/departamento-de-ingenier%C3%ADa-industrial/persons/

[2] Consultada en Octubre de 2023. https://dadip.unison.mx/wp-content/uploads/2018/02/SNI-FII3T.pdf

[3] Consultada en Octubre de 2023. https://dadip.unison.mx/wp-content/uploads/2018/02/Distribucion-Nivel-Div.-y-Genero-2022.pdf

[4] Consultada en Octubre de 2023. https://planeacion.unison.mx/sie/docentes.php

[5] Consultado en Octubre de 2023. https://www.industrial.uson.mx/pages/directorio_new

[6] Consultada en Octubre de 2023. https://dadip.unison.mx/wp-content/uploads/2018/02/AREAS-PRIORITARIAS-DI-URC.pdf

[7] Consultado en Octubre de 2023. https://www.unison.mx/ley-numero-169-organica-de-la-universidad-de-sonora/