

Omar Montaña Rivas

Curriculum Vitae

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University Education and Degrees Awarded

- 01/2008–11/2011 **Ph.D. in Informatics**, *University of Edinburgh*, Edinburgh.
Thesis: *Scheme-based Theorem Discovery and Concept Invention*, under the supervision of Dr. Roy McCasland and Prof. Alan Bundy, and examined by Dr. Andrew Ireland (Heriot Watt University) and Dr. Jacques Fleuriot (University of Edinburgh).
- 08/2001–12/2002 **M.Sc. in Intelligent Systems**, *Instituto Tecnológico y de Estudios Superiores de Monterrey*, Monterrey.
Thesis: *Case-Based Agent incorporation to JITIK*, under the supervision of Dr. José Luis Aguirre Cervantes.
- 08/1997–06/2001 **BSc. in Electronics**, *Universidad Autónoma de San Luis Potosí*, San Luis Potosí.
Social Service: *Tridimensional Fractal Modelation* under the supervision of Dr. Gelasio Salazar Anaya. Instituto de Investigación en Comunicación Óptica.

Career since Graduation

- 08/2003–date **Full-time Professor in Informatics**, *Universidad Politécnica de San Luis Potosí*, San Luis Potosí, S.L.P., México.

Research Projects (last 5)

- 05/2016–date **Proyecto de Prototipo de Simulador de Conducción de Vehículos de Carga Pesada para Capacitación y Evaluación de Transportistas en el Sector Automotriz**, *Universidad Politécnica de San Luis Potosí and APEX Racing Simulators*.
Sponsored by CONACYT
- 01/2016–date **Sistema automático experto para el control de la diabetes**, *Universidad Politécnica de San Luis Potosí and Universidad Politécnica de Victoria*.
Submitted to CONACYT
- 05/2015–05/2016 **Asociación entre el patrón de reconocimiento facial y funciones ejecutivas en pacientes con esquizofrenia y controles sanos**, *Universidad Autónoma de San Luis Potosí, Universidad Politécnica de San Luis Potosí and Clínica Psiquiátrica Dr. Everardo Neumann Peña*.
Sponsored by CONACYT and Secretaría de Salud.
- 09/2014–08/2016 **Plataforma avanzada de comunicaciones para redes de mini-UAV aplicadas a la prevención, control y reacción rápida en situaciones de emergencia**, *Universidad Autónoma de San Luis Potosí, Universidad Politécnica de San Luis Potosí*.
Sponsored by CONACYT.
- 08/2013–12/2015 **Desarrollo de la plataforma tecnológica para el sensado, procesamiento, almacenamiento e interpretación de señales generadas por el cuerpo humano para el apoyo a la prevención de enfermedades crónico degenerativas**, *Universidad Politécnica de San Luis Potosí*.
Sponsored by PROMEP.

Distinctions

- 2015 **Perfil PRODEP.**
Awarded by “Subsecretaría de Educación Superior” in “Programa del Desarrollo Profesional Docente” (PRODEP) program.
- 2012 **Apoyo a la Reincorporación de Exbecarios PROMEP.**
Awarded by “Subsecretaría de Educación Superior” in “Programa del Desarrollo Profesional Docente” (PRODEP) program.
- 2010 **Invited to submit journal version of MICAI’10 best paper to the journal of Expert Systems with Applicatins.**
Awarded by Mexican Society for Artificial Intelligence (SMIA) [2].
- 2010 **MICAI’10 Best Paper Award.**
Awarded by Mexican Society for Artificial Intelligence (SMIA).
- 2007 **Beca PROMEP para estudios de posgrado de alta calidad.**
Awarded by “Subsecretaría de Educación Superior” in “Programa del Desarrollo Profesional Docente” (PRODEP) program.
- 2004 **Apoyo a la Incorporación de Nuevos PTC.**
Awarded by “Subsecretaría de Educación Superior” in “Programa del Desarrollo Profesional Docente” (PRODEP) program.
- 2001 **High Academic Performance Titulation Award.**
Awarded by Universidad Autónoma de San Luis Potosí.

Publications

Omar Montano-Rivas. Completion-based automated theory exploration. *Advances in Artificial Intelligence and Its Applications*, pages 92–109, 2013.

Omar Montano-Rivas, Roy McCasland, Lucas Dixon, and Alan Bundy. Scheme-based theorem discovery and concept invention. *Expert Systems with Applications*, 39(2):1637 – 1646, 2012.

Omar Montano-Rivas, Roy McCasland, Lucas Dixon, and Alan Bundy. Scheme-based synthesis of inductive theories. In *Proceedings of the 9th Mexican international conference on Advances in artificial intelligence: Part I*, MICAI’10, pages 348–361, Berlin, Heidelberg, 2010. Springer-Verlag. Best Paper Award.

JL Aguirre and O. Montaña. An agent-based knowledge flow system using case-based technologies. In *Workshops on Intelligent Computing associated with the Mexican Conference on Artificial Intelligence MICAI 2004*, pages 100–107, Mexico City, Mexico, April 2004. IEEE, SheremetovL., Alvarado M. eds.

[at MICAI]

Professional Activities

- 05/2018 **Arbitration committee**, COMIA 2018 (*Congreso Mexicano de Inteligencia Artificial*).
- 11/2017 **Technical committee**, CENEVAL Software Engineering graduation exam.
- 06/2017 **Evaluation committee**, CONACyT Graduate Scholarships.
- 05/2017 **Arbitration committee**, National prototype competition XIX.
- 11/2016 **Reviewer**, Special Issue of the Journal of Symbolic Computation on Symbolic Computation in Software Science.
- 07/2016 **Program Committee**, MICAI-2016 (*15th Mexican International Conference on Artificial Intelligence*).
- 07/2016 **Reviewer**, MICAI-2016 (*15th Mexican International Conference on Artificial Intelligence*).
- 29–30/01/2016 **Arbitration committee**, Proyecto Multimedia, San Luis Potosí, S.L.P., México.
X Concurso Latinoamericano de Proyectos de Cómputo.
- 04/2015-date **Member of the “Red Temática Mexicana de Ingeniería de Software”**, Universidad Politécnica de San Luis Potosí, San Luis Potosí, S.L.P., México.

- 01/2015–04/2015 **Member of the Local Organizing Committee**, *Universidad Politécnica de San Luis Potosí*, San Luis Potosí, S.L.P., México, Congreso Internacional de Investigación e Innovación en Ingeniería de Software 2015.
- 03/2014 **Reviewer**, *JSC-SCSS13 (Journal of Symbolic Computation: Special Issue on Symbolic Computation in Software Science)*.
- 08/2013 **Reviewer**, *LPAR-19 (Logic for Programming Artificial Intelligence and Reasoning)*.
- 06/2013 **Arbitration committee**, *Comité del Premio San Luis Potosí de Tecnología e Innovación*, Canacintra, San Luis Potosí, S.L.P., México.
- 04/2013 **Arbitration committee**, *Comité del Premio San Luis Potosí de Tecnología e Innovación–Primera Edición del Galardón*, Canacintra, San Luis Potosí, S.L.P., México.
- 11/2012 **Reviewer**, *CIIECC-2013 (The Iberoamerican Conference on Electronics Engineering and Computer Science)*.
- 11/2012–date **Member of the Board**, *Artificial Intelligence Mexican Society (SMIA)*.
- 02/2012–11/2012 **Chair of the Local Organizing Committee**, 11th *Mexican International Conference on Artificial Intelligence*, Universidad Politécnica de San Luis Potosí, San Luis Potosí, S.L.P., México.

Research Visits

- 03/2012–04/2012 **Sistemas Orientados de Reescritura de Términos para la Exploración de Teorías Inductivas**, *School of Informatics*, Edinburgh, United Kingdom.
Sponsored by Secretaría de Educación Pública in PRODEP program.
- 06/2010–07/2010 **Scheme-based theorem discovery and concept invention**, *Research Institute for Symbolic Computation*, Hagenberg, Austria.
Sponsored by EPSRC grants EP/F033559/1 and EP/E005713/1.
- 06/2009–07/2009 **Scheme-based theorem discovery and concept invention**, *Research Institute for Symbolic Computation*, Hagenberg, Austria.
Sponsored by RISC-Linz Transnational Access Programme (No. 026133).

Talks at Seminars, Workshops and Conferences

- 29/11/2013 **Completion-based Automated Theory Exploration [1]**, 12th *Mexican International Conference on Artificial Intelligence*, Universidad Autónoma Metropolitana, Cd. de México, México.
- 17/06/2011 **Scheme-based Synthesis of Inductive Theories**, *Scottish Theorem Proving meeting*, School of Computing, University of Dundee, Dundee, United Kingdom.
- 10/11/2010 **Scheme-based Synthesis of Inductive Theories**, 9th *Mexican International Conference on Artificial Intelligence [3]*, Universidad Autónoma del Estado de Hidalgo, Pachuca, México.
- 03/08/2010 **Scheme-based Synthesis of Inductive Theories**, *CIAO-2010 Workshop*, Research Institute for Symbolic Computation, Hagenberg, Austria.
- 14/07/2010 **Scheme-based Definition and Conjecture Synthesis for Inductive Theories**, *Automatheo-2010 Workshop*, University of Edinburgh, Edinburgh, United Kingdom.
- 02/04/2009 **Scheme-based Theorem Discovery and Concept Invention**, *CIAO-2009 Workshop*, German Research Center for Artificial Intelligence, Schloß Etelsen, Langwedel, Germany.
- 28/11/2008 **Scheme-based Theorem Discovery and Concept Invention**, *CISA Seminars*, Center for Intelligent Systems and Applications, University of Edinburgh, Edinburgh, United Kingdom.