Sonia Mendoza

Computer Science Department
Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional
(CINVESTAV-IPN)
Av. Instituto Politécnico Nacional #2508
Col. San Pedro Zacatenco
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Born: March 27, 1970—Pachuca de Soto, Hidalgo, Mexico.
Nationality: Mexican.

Current position

Full-time researcher, Computer Science Department, CINVESTAV-IPN.

Academic coordinator, Computer Science Department, CINVESTAV-IPN.

Sistema Nacional de Investigadores, level 1.

Areas of Specialisation

CSCW; Groupware; Internet of Things; Human-Computer Interaction.

Education

2006 Postdoc Logiciels Systèmes et Réseaux, LSR-IMAG.

2006 PhD in Computer Science, Institut National Polytechnique de Grenoble.

2001 MSc Computer Science, Université Joseph Fourier.

2000 MSc in Electrical Engineering, Universidad Nacional Autónoma de México.

1995 BSc in Computer Science, Instituto Tecnológico de Pachuca.

Publications

Papers Published in Journals indexed in the *Journal Citations Report*

2021 Mendoza, S., Cortés-Dávalos, A., Sánchez-Adame, L. M., & Decouchant, D. (2021). An architecture for collaborative terrain sketching with mobile devices. *Sensors*, *21*(23). https://doi.org/10.3390/s21237881

2021 Sánchez-Adame, L. M., Mendoza, S., Urquiza, J., Rodríguez, J., & Meneses-Viveros, A. (2021). Towards a set of heuristics for evaluating chatbots. *IEEE Latin America Transactions*, *19*(12), 2037–2045. https://doi.org/10.1109/TLA.2021.9480145

2020 Sánchez-Adame, L. M., Urquiza-Yllescas, J. F., & Mendoza, S. (2020). Measuring anticipated and episodic ux of tasks in social networks. *Applied Sciences*, *10*(22). https://doi.org/10.3390/app10228199

2018 García, K., Mendoza, S., Decouchant, D., & Brézillon, P. (2018). Facilitating resource sharing and selection in ubiquitous multi-user environments. *Information Systems Frontiers*, *20*(5), 1075–1095. https://doi.org/10.1007/s10796-016-9708-0

2018 Meneses-Viveros, A., Hernández-Rubio, E., Mendoza, S., Rodríguez, J., & Márquez Quintos, A. B. (2018). Energy saving strategies in the design of mobile device applications. *Sustainable Computing: Informatics and Systems*, *19*, 86–95. https://doi.org/https://doi.org/10.1016/j.suscom.2018.07.011

2018 Beltran, A., & Mendoza, S. (2018). Symmetrichull: A convex hull algorithm based on 2d geometry and symmetry. *IEEE Latin America Transactions*, *16*(8), 2289–2295. https://doi.org/10.1109/TLA.2018.8528248

2013 Decouchant, D., Mendoza, S., Sánchez, G., & Rodríguez, J. (2013). Adapting groupware systems to changes in the collaborator's context of use. *Expert Systems with Applications*, *40*(11), 4446–4462. https://doi.org/https://doi.org/10.1016/j.eswa.2013.01.043

2013 Saucedo-Tejada, G., Mendoza, S., & Decouchant, D. (2013). F2fmi: A toolkit for facilitating face-to-face mobile interaction. *Expert Systems with Applications*, *40*(15), 6173–6184. https://doi.org/https://doi.org/10.1016/j.eswa.2013.05.043

2013 García, K., Mendoza, S., Decouchant, D., Rodríguez, J., & Pérez, T. (2013). Determining and locating the closest available resources to mobile collaborators. *Expert Systems with Applications*, *40*(7), 2511–2529. https://doi.org/https://doi.org/10.1016/j.eswa.2012.10.069

2012 Baquero, R., Rodríguez, J., Mendoza, S., Decouchant, D., & Papis, A. P. M. (2012). Funblocks. a modular framework for ami system development. *Sensors*, *12*(8), 10259–10291. https://doi.org/10.3390/s120810259

2009 Decouchant, D., Escalada-Imaz, G., Martinez Enriquez, A. M., Mendoza, S., & Muhammad, A. (2009). Contextual awareness based communication and coauthoring proximity in the internet. *Expert Systems with Applications*, *36*(4), 8391–8406. https://doi.org/https://doi.org/10.1016/j.eswa.2008.10.082

Book Chapters

2019 Hernández-Rubio, E., Meneses-Viveros, A., & Mendoza-Chapa, S. G. (2019). Mobile distributed user interfaces. In J. H. Ortiz (Ed.), *Mobile computing*. IntechOpen. https://doi.org/10.5772/intechopen.86563

2010 Decouchant, D., Mendoza, S., & Rodríguez, J. (2010). Suited support for distributed web intelligence cooperative work. In Y. Badr, R. Chbeir, A. Abraham & A.-E. Hassanien (Eds.), *Emergent web intelligence: Advanced semantic technologies* (pp. 137–184). Springer London. https://doi.org/10.1007/978-1-84996-077-9_7

Papers Published in Proceedings of Peer-Reviewed International Conferences

2020 Mendoza, S., Hernández-León, M., Sánchez-Adame, L. M., Rodríguez, J., Decouchant, D., & Meneses-Viveros, A. (2020). Supporting student-teacher interaction through a chatbot. In P. Zaphiris & A. Ioannou (Eds.), *Learning and collaboration technologies. human and technology ecosystems* (pp. 93–107). Springer International Publishing. https://doi.org/10.1007/978-3-030-50506-6_8

2020 Sánchez-Adame, L. M., Mendoza, S., González-Beltrán, B. A., Meneses-Viveros, A., & Rodríguez, J. (2020). The man in the besieged castle: Heuristic evaluation of home security systems. In A. Moallem (Ed.), *Hci for cybersecurity, privacy and trust* (pp. 250–260). Springer International Publishing. https://doi.org/10.1007/978-3-030-50309-3_17

2019 Sánchez-Adame, L. M., Mendoza, S., Meneses-Viveros, A., & Rodríguez, J. (2019b). Towards a set of design guidelines for multi-device experience. In M. Kurosu (Ed.), *Human-computer interaction. perspectives on design* (pp. 210–223). Springer International Publishing. https://doi.org/10.1007/978-3-030-22646-6_15

2019 Sánchez-Adame, L. M., Mendoza, S., Meneses-Viveros, A., & Rodríguez, J. (2019a). Consistency in multi-device environments: A case study. In K. Arai, R. Bhatia & S. Kapoor (Eds.), *Intelligent computing* (pp. 232–242). Springer International Publishing. https://doi.org/10.1007/978-3-030-22871-2_17

2018 Sánchez-Adame, L. M., Mendoza, S., González-Beltrán, B. A., Rodríguez, J., & Meneses-Viveros, A. (2018b). Aux and ux evaluation of user tools in social networks. *2018 IEEE/WIC/ACM International Conference on Web Intelligence (WI)*, 104–111. https://doi.org/10.1109/WI.2018.0-101

2018 Sánchez-Adame, L. M., Mendoza, S., González-Beltrán, B. A., Rodríguez, J., & Meneses-Viveros, A. (2018a). Ux evaluation over time: User tools in social networks. *2018 15th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 1–6. https://doi.org/10.1109/ICEEE.2018.8533950

2018 Sánchez-Adame, L. M., Mendoza, S., González-Beltrán, B. A., Meneses-Viveros, A., & Rodríguez, J. (2018). Towards an aux evaluation framework for user tools in virtual communities. In A.

Rodrigues, B. Fonseca & N. Preguiça (Eds.), *Collaboration and technology* (pp. 25–33). Springer International Publishing. https://doi.org/doi.org/10.1007/978-3-319-99504-5_3

2018 Ramírez-Díaz, A. J., Rodríguez-García, J., Mendoza, S., & Viveros, A. M. (2019). Indoor location and tracking system using computer vision. In Y. Tang, Q. Zu & J. G. Rodríguez García (Eds.), *Human centered computing* (pp. 613–624). Springer International Publishing. https://doi.org/10.1007/978-3-030-15127-0_61

2018 Beltrán-Herrera, A., & Mendoza, S. (2018). Fast convex hull by a geometric approach. In J. F. Martínez-Trinidad, J. A. Carrasco-Ochoa, J. A. Olvera-López & S. Sarkar (Eds.), *Pattern recognition* (pp. 51–61). Springer International Publishing. https://doi.org/10.1007/978-3-319-92198-3_6

2016 Cortés-Dávalos, A., & Mendoza, S. (2016b). Collaborative web authoring of 3d surfaces using augmented reality on mobile devices. *2016 IEEE/WIC/ACM International Conference on Web Intelligence (WI)*, 640–643. https://doi.org/10.1109/WI.2016.0113

2016 Cortés-Dávalos, A., & Mendoza, S. (2016c). Layout planning for academic exhibits using augmented reality. *2016 13th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 1–6. https://doi.org/10.1109/ICEEE.2016.7751241

2016 Cortés-Dávalos, A., & Mendoza, S. (2016a). Augmented reality-based groupware for editing 3d surfaces on mobile devices. *2016 International Conference on Collaboration Technologies and Systems (CTS)*, 319–326. https://doi.org/10.1109/CTS.2016.0065

2014 García, K., Velasco, S., Mendoza, S., & Decouchant, D. (2014a). A matchmaking algorithm for resource discovery in multi-user settings. *2014 IEEE/WIC/ACM International Joint Conferences on Web Intelligence (WI) and Intelligent Agent Technologies (IAT)*, *3*, 352–359. https://doi.org/10.1109/WI-IAT.2014.188

2014 Velasco, S., Mendoza, S., García, K., & Decouchant, D. (2014). A user restrictions-based semantic matchmaking service for resource discovery. *2014 11th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 1–6. https://doi.org/10.1109/ICEEE.2014.6978312

2014 Arellanes, D., Mendoza, S., & Decouchant, D. (2014). Support for resource aggregation in collaborative p2p systems. *2014 11th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 1–6. https://doi.org/10.1109/ICEEE.2014.6978323

2014 Castro, M., & Mendoza, S. (2014). Supporting face to face collaboration through dynamic arrays of mobile devices. *2014 11th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 1–6. https://doi.org/10.1109/ICEEE.2014.6978320

2014 Cabello, U., Rodríguez, J., Meneses, A., Mendoza, S., & Decouchant, D. (2014). Fault tolerance in heterogeneous multi-cluster systems through a task migration mechanism. *2014 11th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 1–7. https://doi.org/10.1109/ICEEE.2014.6978266

2014 García, K., Velasco, S., Mendoza, S., & Decouchant, D. (2014b). A semantic approach to shared resource discovery. In N. Baloian, F. Burstein, H. Ogata, F. Santoro & G. Zurita (Eds.), *Collaboration and technology* (pp. 137–152). Springer International Publishing. https://doi.org/10.1007/978-3-319-10166-8_13

2013 Martínez-Delgado, J. S., Mendoza, S., & García, K. (2013a). Flexible bimodal recognition of collaborators in pervasive environments. *2013 12th Mexican International Conference on Artificial Intelligence*, 151–156. https://doi.org/10.1109/MICAI.2013.26

2013 García, K., Kirsch-Pinheiro, M., Mendoza, S., & Decouchant, D. (2013a). An ontological model for resource sharing in pervasive environments. *2013 IEEE/WIC/ACM International Joint Conferences on Web Intelligence (WI) and Intelligent Agent Technologies (IAT)*, *1*, 179–184. https://doi.org/10.1109/WI-IAT.2013.27

2013 García, K., Kirsch-Pinheiro, M., Mendoza, S., & Decouchant, D. (2013b). Ontology-based resource discovery in pervasive collaborative environments. In P. Antunes, M. A. Gerosa, A. Sylvester, J. Vassileva & G.-J. de Vreede (Eds.), *Collaboration and technology* (pp. 233–240). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-41347-6_17

2013 Martínez-Delgado, J. S., Mendoza, S., & García, K. (2013b). Recognizing collaborators using a flexible approach based on face and voice biometrics. *2013 10th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 324–329. https://doi.org/10.1109/ICEEE.2013.6676072

2013 Avila-Mora, I. M., Mendoza, S., García, K., Delgado-Hernández, R., Marrufo-Meléndez, O. R., & Juan-Orta, D. S. (2013). Finding scars in the cerebral cortex through the analysis of intensities in t2/mri sequences. *2013 10th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 330–335. https://doi.org/10.1109/ICEEE.2013.6676091

2013 Romero, M., Mendoza, S., & Sánchez, G. (2013). Xare: A framework for developing context-aware applications for co-located collaborative work. *2013 10th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, 336–341. https://doi.org/10.1109/ICEEE.2013.6676006

2011 Girón, J. E., Mendoza, S., & Torres-Huitzil, C. (2011). Mechanism for dynamic deployment of plastic mobile cross-platform user interfaces. *2011 8th International Conference on Electrical Engineering, Computing Science and Automatic Control*, 1–5. https://doi.org/10.1109/ICEEE.2011.6106613

2011 Saucedo-Tejada, G., & Mendoza, S. (2011). An architecture for supporting face-to-face mobile interaction. *2011 8th International Conference on Electrical Engineering, Computing Science and Automatic Control*, 1–6. https://doi.org/10.1109/ICEEE.2011.6106576

2011 Olivares, A., Mendoza, S., & de Luca, A. (2011). An architecture to support context of use in groupware systems. *2011 8th International Conference on Electrical Engineering, Computing Science and Automatic Control*, 1–6. https://doi.org/10.1109/ICEEE.2011.6106581

2011 Beltrán, A., & Mendoza, S. (2011). Efficient algorithm for real-time handwritten character recognition in mobile devices. *2011 8th International Conference on Electrical Engineering, Computing Science and Automatic Control*, 1–6. https://doi.org/10.1109/ICEEE.2011.6106583

2011 Baquero S., R., Rodríguez G., J. G., Mendoza, S., & Decouchant, D. (2011). Towards a uniform sensor-handling scheme for ambient intelligence systems. *2011 8th International Conference on Electrical Engineering, Computing Science and Automatic Control*, 1–6. https://doi.org/10.1109/ICEEE.2011.6106653

2011 Anzures, H., & Mendoza, S. (2011). Multi-user interaction with public screens using mobile devices. *2011 8th International Conference on Electrical Engineering, Computing Science and Automatic Control*, 1–5. https://doi.org/10.1109/ICEEE.2011.6106647

2011 Mendoza, S., Decouchant, D., Sánchez, G., Rodríguez, J., & Mateos Papis, A. P. (2011). User interface plasticity for groupware. In H. Cherifi, J. M. Zain & E. El-Qawasmeh (Eds.), *Digital information and communication technology and its applications* (pp. 380–394). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-21984-9_33

2011 García, K., Mendoza, S., Decouchant, D., Rodríguez, J., & Mateos Papis, A. P. (2011). Resource discovery for supporting ubiquitous collaborative work. In H. Cherifi, J. M. Zain & E. El-Qawasmeh (Eds.), *Digital information and communication technology and its applications* (pp. 614–628). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-22027-2_51

2010 Sánchez, G., Mendoza, S., Decouchant, D., Gallardo-López, L., & Rodríguez, J. (2010). Plasticity of interaction interfaces: The study case of a collaborative whiteboard. In G. Kolfschoten, T. Herrmann & S. Lukosch (Eds.), *Collaboration and technology* (pp. 265–280). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-15714-1_20

2009 Mendoza, S., Gomez, V., Navarrete, M., Decouchant, D., Garcia, K., Olague, G., & Rodriguez, J. (2009). Area-based collaborative ubiquitous work within organizational environments. *2009 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology*, *1*, 140–144. https://doi.org/10.1109/WI-IAT.2009.28

2009 Gómez, V., Mendoza, S., Decouchant, D., & Rodríguez, J. (2009). Nomadic user interaction/cooperation within autonomous areas. In L. Carriço, N. Baloian & B. Fonseca (Eds.), *Groupware: Design, implementation, and use* (pp. 32–40). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-04216-4_3

2008 García, K., Mendoza, S., Olague, G., Decouchant, D., & Rodríguez, J. (2008). Shared resource availability within ubiquitous collaboration environments. In R. O. Briggs, P. Antunes, G.-J. de Vreede & A. S. Read (Eds.), *Groupware: Design, implementation, and use* (pp. 25–40). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-92831-7_3

2008 Decouchant, D., Mendoza, S., & Rodríguez, J. (2008). A realistic and efficient distributed infrastructure for nomadic web cooperative work. *2008 Mexican International Conference on Computer Science*, 151–162. https://doi.org/10.1109/ENC.2008.23

2008 Rodríguez, J., Decouchant, D., Mendoza, S., & Escobar, C. M. (2008). Java-based framework for implementing soft real-time distributed applications. *2008 Mexican International Conference on Computer Science*, 163–168. https://doi.org/10.1109/ENC.2008.38

2005 Mendoza, S., Decouchant, D., Moran, A., Enriquez, A., & Favela, J. (2005). A flexible distribution service for a co-authoring environment on the web. *Sixth Mexican International Conference on Computer Science (ENC'05)*, 10–17. https://doi.org/10.1109/ENC.2005.4

2005 Mendoza, S., Decouchant, D., Morán, A. L., Enríquez, A. M. M., & Favela, J. (2005). Adaptive distribution support for co-authored documents on the web. In H. Fukś, S. Lukosch & A. C. Salgado (Eds.), *Groupware: Design, implementation, and use* (pp. 33–48). Springer Berlin Heidelberg. https://doi.org/10.1007/11560296_3

2004 Mendoza, S., Decouchant, D., Martínez Enríquez, A. M., & Morán, A. L. (2004). Adaptive resource management in the piñas web cooperative environment. In J. Favela, E. Menasalvas & E. Chávez (Eds.), *Advances in web intelligence* (pp. 33–43). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-24681-7_6

2004 Mendoza, S., Morán, A. L., Decouchant, D., Enríquez, A. M. M., & Favela, J. (2004). Access control-based distribution of shared documents. In R. Meersman, Z. Tari & A. Corsaro (Eds.), *On the move to meaningful internet systems 2004: Otm 2004 workshops* (pp. 12–13). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-30470-8_6

2002 Morán, A. L., Decouchant, D., Favela, J., Martínez-Enríquez, A. M., González Beltrán, B., & Mendoza, S. (2002). Piñas: Supporting a community of co-authors on the web. In J. Plaice, P. G. Kropf, P. Schulthess & J. Slonim (Eds.), *Distributed communities on the web* (pp. 113–124). Springer Berlin Heidelberg. https://doi.org/10.1007/3-540-36261-4_12

2002 Decouchant, D., Martńez-Enríquez, A. M., Favela, J., L.Morán, A., Mendoza, S., & Jafar, S. (2002). A distributed event service for adaptive group awareness. In C. A. Coello Coello, A. de Albornoz, L. E. Sucar & O. C. Battistutti (Eds.), *Micai 2002: Advances in artificial intelligence* (pp. 506–515). Springer Berlin Heidelberg. https://doi.org/10.1007/3-540-46016-0_53

2000 Mendoza, S., Romero-Salcedo, M., & Oktaba, H. (2000). Group awareness support in collaborative writing systems. *Proceedings Sixth International Workshop on Groupware. CRIWG 2000*, 112–118. https://doi.org/10.1109/CRIWG.2000.885162

Patents

2019 Meneses Viveros, A., González Beltrán, B. A., Mendez García, D., Rodríguez García, J. G., **Sánchez Adame, Luis Martín** & Mendoza Chapa, S. G. (2019). Sistema y método para generar una interfaz de usuario multimodal en múltiples dispositivos de cómputo que conforman espacios interactivos [Solicitud de Patente MX/a/2019/012611 https://vidoc.impi.gob.mx/visor?usr=SIGA&texp=SI&tdoc=E&id=MX/a/2019/012611]

2017 Olivares Toledo, A., & Mendoza Chapa, S. G. (2017). Sistema y método para coordinación y sincronización de actividades en un entorno colaborativo [Patent number: 352343. Date of issuance: October 13, 2017, Expiration date: June 27, 2033.]

Science Outreach

2022 **Sánchez Adame, Luis Martín**. (2022). Epistemología de la experiencia de usuario anticipada [Available Online https://avanceyperspectiva.cinvestav.mx/epistemologia-de-la-experiencia-de-usuario-anticipada/]

2022 Desarrollan alternativa para procesos de comunicación entre dispositivos inteligentes [Available Online https://conexion.cinvestav.mx/Publicaciones/desarrollan-alternativa-para-procesos-de-comunicaci243n-entre-dispositivos-inteligentes]. (2022)

2022 Con realidad aumentada, creativos pueden colaborar fácilmente [Available Online https://conexion.cinvestav.mx/COVID-19/Contenido-COVID-19/con-realidad-aumentada-creativos-pueden-colaborar-f225cilmente]. (2022)

Courses Taught

- **Context Aware Interfaces** (PhD level). 60 hours. It has been taught 1 time at CINVESTAV-IPN since 2020.
- **GUI Evaluation Methods** (PhD level). 60 hours. It has been taught 1 time at CINVESTAV-IPN since 2020.
- **Object-Oriented Programming** (MSc level). 60 hours. It has been taught 5 times at CINVESTAV-IPN since 2007.
- **Human-Computer Interaction** (MSc level). 60 hours. It has been taught 7 times at CINVESTAV-IPN since 2007.
- **Groupware** (MSc level). 60 hours. It has been taught 10 times at CINVESTAV-IPN since 2009.

Alumni

PhD in Computer Science

2021 **Luis Martín Sánchez Adame**. Co-advisor Dr. Beatriz Adriana González Beltrán.

Thesis title: "Epistemology of Anticipated User Experience: Task, User and Heuristic Approaches."

Thesis defense: November 30, 2021.

2019 **Alberto Beltrán Herrera**.

Thesis title: "Fitting and Classification of Human-made Objects, Using Automatic Sketching Techniques and Geosemantic Restrictions."

Thesis defense: February 22, 2019.

2017 **Andrés Cortés Dávalos**.

Thesis title: "A Framework for Collaborative Editing of 3D Objects Using Augmented Reality."

Thesis defense: February 28, 2017.

2014 **Ivonne Maricela Avila Mora**. Co-advisor Dr. Adriano de Luca Pennacchia.

Thesis title: "A Methodology based on the Analysis of Intensities in Magnetic Resonance Images for the Detection of Scars in the Cerebral Cortex."

Thesis defense: January 22, 2014.

2013 **Gabriela Sánchez Morales**. Co-advisor Dr. Dominique Decouchant.

Thesis title: "XARE: A Development Framework for Context-Aware Groupware."

Thesis defense: December 16, 2013.

2013 **Elvia Kimberly García García**.

Thesis title: "Ascertaining the Availability of Shared Resources in Ubiquitous Collaborative Environments."

Thesis defense: December 11, 2013.

MSc in Computer Science

2021 **Víctor Hugo Espinoza Sixtos**. Co-advisor Dr. José Guadalupe Rodríguez García.

Thesis title: "Support for teacher-student interaction through a chatbot."

Thesis defense: November 23, 2021.

2020 **Juan Antonio Leyva García**. Co-advisor Dr. Hugo Jair Escalante Balderas.

Thesis title: "Automatic segmentation of muscle tissue in computerized tomography in L3 with deep learning."

Thesis defense: December 16, 2020.

2020 **Angel Isaac Rodríguez Cosme**. Co-advisor Dr. Cuauhtemoc Mancillas López.

Thesis title: "Architecture for a reporting system based on Blockchain and cloud technologies."

Thesis defense: November 24, 2020.

2019 **Manuel Hernández León**. Co-advisor Dr. José Guadalupe Rodríguez García.

Thesis title: "Development of an Intelligent Chatbot, Study Case: Teachers and Students in Secondary School."

Thesis defense: February 20, 2019.

2018 **Adrián Josué Ramírez Díaz**. Co-advisor Dr. José Guadalupe Rodríguez García.

Thesis title: "Design and implementation of low-cost service robots for seniors."

Thesis defense: November 30, 2018.

2017 **Ismael González Martínez**.

Thesis title: "Conceptual Framework for Context Management in Groupware."

Thesis defense: December 8, 2017.

2017 **José Luis Ortigosa Flores**. Co-advisor Dr. Dominique Decouchant.

Thesis title: "Management of Shared and Distributed Resources for Web Collaborative Work."

Thesis defense: December 8, 2017.

2017 **Diana Méndez García**. Co-advisor Dr. Beatriz Adriana González Beltrán.

Thesis title: "A Model for the Design of Multi-modal User Interfaces."

Thesis defense: May 18, 2017.

2016 **Erik Alejandro Reyes Lozano**.

Thesis title: "Multi-platform Support for Collaborative Workspaces Running on Arrays of Mobile Devices."

Thesis defense: December 14, 2016.

2016 **Luis Alfonso Marín Mota**. Co-advisor Dr. Dominique Decouchant.

Thesis title: "3D Mapping of Interior Locations Using Multiple MAVs (Micro Aerial Vehicles)."

Thesis defense: December 7, 2016.

2016 **Luis Martín Sánchez Adame**.

Thesis title: "Coherence Heuristics for the Design of Meta-user Interfaces."

Thesis defense: February 23, 2016.

2015 **Reinaldo Rodríguez Palacio**.

Thesis title: "Reading and Writing Computing Support for Children with Down Syndrome."

Thesis defense: December 16, 2015.

2015 **César Adrián Ordaz Santiago**.

Thesis title: "Toolkit for the development of Leap Motion-based Multi-user Interaction Supports."

Thesis defense: December 8, 2015.

2014 **Marco Antonio Castro Hernández**.

Thesis title: "Transitions from Individual to Collaborative Work by Plastic Remodeling and Redistribution Techniques."

Thesis defense: December 2, 2014.

2014 **Damián Isaid Arellanes Molina**. Co-advisor Dr. Dominique Decouchant.

Thesis title: "RASupport: Flexible, Bio-inspired, Auto-configurable and Multi-agent Support for Resource Aggregation in Collaborative P2P Systems."

Thesis defense: November 28, 2014.

2014 **Salma Leonor Velasco Pérez**. Co-advisor Dr. Elvia Kimberly García García.

Thesis title: "A Semantic Matchmaking Algorithm for Locating Resources in Collaborative Environments."

Thesis defense: November 28, 2014.

2013 **Eric Abraham Vargas Flores**.

Thesis title: "Face-to-Face Collaboration Using Arrays of Mobile Devices."

Thesis defense: December 6, 2013.

2013 **Jesús Salvador Martínez Delgado**.

Thesis title: "Multimodal Support for Filtering Information in Groupware Systems."

Thesis defense: December 5, 2013.

2013 **Michael Iván Romero Gama**.

Thesis title: "Xare-F2F: A Framework for Developing Adaptive Applications for Face-to-Face Collaboration."

Thesis defense: November 6, 2013.

2012 **Laura Elizabeth Granados Hernández**.

Thesis title: "Integrating communication, production and coordination spaces into a cooperative environment."

Thesis defense: December 14, 2012.

2012 **José Eduardo Girón Camacho**. Co-advisor Dr. César Torres Huitzil.

Thesis title: "Mobile Mechanism for Plastic Adaptation of Multi-platform Graphical User Interfaces."

Thesis defense: February 29, 2012.

2012 **Alberto Beltrán Herrera**. Co-advisor Dr. Adriano de Luca Pennacchia.

Thesis title: "Marduk: Sixth Sense Technology System for Mobile Devices."

Thesis defense: February 24, 2012.

2011 **Genaro Saucedo Tejada**.

Thesis title: "Library for Maintaining Shared Data Consistency on Mobile Devices."

Thesis defense: December 13, 2011.

2011 **Herón Arzáquel Anzures Reyes**. Co-advisor Dr. Adriano de Luca Pennacchia.

Thesis title: "Platform for Multi-User Contextual Applications in Nomadic Environments."

Thesis defense: December 15, 2011.

2011 **Anallely Olivares Toledo**. Co-advisor Dr. Adriano de Luca Pennacchia.

Thesis title: "Architecture for Supporting Use Context of Groupware Systems."

Thesis defense: December 7, 2011.

2011 **Tanibet Pérez de los Santos Mondragón**.

Thesis title: "Mechanisms for Locating Resources in the Environment Close to the Collaborator."

Thesis defense: August 26, 2011.

2010 **Madai Navarrete Castro**.

Thesis title: "Management of Workflows Organized by Autonomous Areas for Ubiquitous Environments."

Thesis defense: February 25, 2010.

2010 **Abel Cortazar May**.

Thesis title: "Gradual Presentation of Group Awareness Information."

Thesis defense: February 17, 2010.

2010 **Roberto Enrique Alberto Lira**.

Thesis title: "Semi-plastic Adaptive Remodelation Mechanism for Collaborative Interfaces."

Thesis defense: January 26, 2010.

2009 **Víctor Alberto Gómez Pérez**.

Thesis title: "Interaction Support for Nomadic Users Collaborating within Autonomous Areas."

Thesis defense: December 9, 2009.

2009 **Gabriela Sánchez Morales**.

Thesis title: "Mixte Semi-plastic Redistribution: The Case Study of a Shared Whiteboard."

Thesis defense: February 5, 2009.

2009 **Daniel Cruz García**.

Thesis title: "Design and Deployment of a Flexible Cooperative Agenda within an Unreliable Environment."

Thesis defense: February 4, 2009.

2009 **Javier Solís Angulo**.

Thesis title: "Adaptable Distribution Architecture for Web Collaborative Systems."

Thesis defense: January 29, 2009.

2009 **Elvia Kimberly García García**.

Thesis title: "Shared Resource Availability within a Collaborative and Ubiquitous Environment."

Thesis defense: January 23, 2009.

Funding

2018-2021 *Development of an intelligent chatbot to assist the teaching/learning process in educational and technological subjects.* Role: Project manager. Funding Agency: SEP-CINVESTAV (Call 2018). Number of project 120. Amount: $396,505 MXN (≈ $19,413.50 USD).

Program Committee Member

2021 The IEEE Pervasive Computing and Communication (PerCom 2021) Conference (PerCom Demos).

2021 The IEEE/WIC/ACM International Conference on Web Intelligence (WI 2009-2021).

2021 The International Conference on Collaboration Technologies and Social Computing (CollabTech, formerly known as CRIWG, 2009-2021).

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