PhD Adriana Meza Soria (she, her)

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EDUCATION

- **Ph.D. in Software Engineering** 2017–2022
  University of California, Irvine
  Dissertation: *"Capturing Important Design Bits from Software Design Meetings"*
  GPA: 3.98 (0-4 scale)
- **M.S in Engineering (Summa Cum Laude)** 2016
  CETYS University, Tijuana, Mexico
  GPA: 100 (0-100 scale)
- **B.S. in Computational Systems Engineering** 2013
  Technological Institute of Tijuana (ITT), Tijuana, Mexico
  GPA: 96.39 (0-100 scale)

PROFESSIONAL EXPERIENCE

- **MIT-IBM Watson AI Lab, AI Models Engineering team, *Research Software Engineer*** 2022-present
  Research at the intersection of Generative AI and Software Engineering
- **MIT-IBM Watson AI Lab, APT *Research Intern*** Summer 2021
  Architecture Design and prototyping.
- **Grupo Tress Internacional (GTI), *Senior Software Engineer*** 2013–2017
  End-user application design and development, architectural upgrade design, developers' coaching
- **IWAI Metal Mexico, *IT Assistant*** 2012–2013
  Internal software development and IT management activities
- **TELNOR, *Intern*** 2011–2012
  Early design and prototyping

TEACHING EXPERIENCE

- **Professor**
  UC Irvine CA, U.S.A Summer 2020
  Programming in Java as a second language (undergraduate)
- **Teaching Assistant** Fall 2018–Winter 2021
  UC Irvine CA, U.S.A
- **Professor** 2016–2017
  CETYS University Tijuana, Mexico
- **Professor** 2014–2017
  Autonomous University of Baja California (UABC) Tijuana, Mexico

ACADEMIC SERVICE

- **International Conference on Cooperative and Human Aspects of Software Engineering** 2024
  Short-paper track co-chair
- **International Conference on Cooperative and Human Aspects of Software Engineering** 2023
- *Proceedings chair, Program committee member*
- **Designing Workshop** 2024
  Program committee member
- **Mining Software Repositories** 2021
  Program committee shadow member

HONORS AND AWARDS

- Recipient of Miguel Velez Scholarship (3rd) 2022
- Latino Excellence and Achievement Award 2021
- Grace Hopper Celebration Scholar 2020
- Best product idea & CodePath favorite 2020

- Recipient of Miguel Velez Scholarship (2nd) 2019
- Recipient of Rosalva Gallardo Valencia Graduate Award 2019
- Second place at AMIA Design Challenge 2018
- Recipient of Miguel Velez Scholarship (1st) 2017

ACTIVE RESEARCH AREAS

- Software Engineering & Generative AI: Synthetic Data, Generative AI frameworks and tools
- Human Aspects of Software Engineering: Qualitative Studies (Thematic Analysis, User studies, Case Studies)

PUBLICATIONS

- Mayank Mishra, Matt Stallone, Gaoyuan Zhang, Yikang Shen, Aditya Prasad, **Adriana Meza Soria**, Michele Merler, Parameswaran Selvam, Saptha Surendran, Shivdeep Singh, Manish Sethi, Xuan-Hong Dang, Pengyuan Li, Kun-Lung Wu, Syed Zawad, Andrew Coleman, Matthew White, Mark Lewis, Raju Pavuluri, Yan Koyfman, Boris Lublinsky, Maximilien de Bayser, Ibrahim Abdelaziz, Kinjal Basu, Mayank Agarwal, Yi Zhou, Chris Johnson, Aanchal Goyal, Hima Patel, Yousaf Shah, Petros Zerfos, Heiko Ludwig, Asim Munawar, Maxwell Crouse, Pavan Kapanipathi, Shweta Salaria, Bob Calio, Sophia Wen, Seetharami Seelam, Brian Belgodere, Carlos Fonseca, Amith Singhee, Nirmit Desai, David D. Cox, Ruchir Puri, Rameswar Panda. 2024. Granite Code Models: A Family of Open Foundation Models for Code Intelligence. https://arxiv.org/abs/2405.04324
- Zhen Guo, **Adriana Meza Soria**, Wei Sun, Yikang Shen, Rameswar Panda. 2024. API Pack: A Massive Multilingual Dataset for API Call Generation. https://arxiv.org/abs/2402.09615
- **Adriana Meza Soria**, Taylor Lopez, Elizabeth Seero, Negin Mashhadi, Emily Evans, Janet Burge, and André Van der Hoek. 2024. Characterizing Software Maintenance Meetings: Information Shared, Discussion Outcomes, and Information Captured. In Proceedings of the IEEE/ACM 46th International Conference on Software Engineering (ICSE '24). Association for Computing Machinery, New York, NY, USA, Article 56, 1–13. https://doi.org/10.1145/3597503.3623330
- L. Seero, J. Burge, **A. M. Soria** and A. Van Der Hoek, "Exploring a Research Agenda for Design Knowledge Capture in Meetings," 2023 IEEE/ACM 16th International Conference on Cooperative and Human Aspects of Software Engineering (CHASE), Melbourne, Australia, 2023, pp. 37-42, doi: 10.1109/CHASE58964.2023.00013
- **Adriana Meza Soria.** 2022. Understanding How Information Flows In and Out of Regularly Scheduled Software Maintenance Design Meetings: A Case Study. *(Dissertation). https://escholarship.org/uc/item/283097z2*
- **Adriana Meza Soria**, André van der Hoek, and Janet Burge. 2022. Recurring distributed software maintenance meetings: toward an initial understanding. In Proceedings of the 15th International Conference on Cooperative and Human Aspects of Software Engineering (CHASE '22). Association for Computing Machinery, New York, NY, USA, 21–25. https://doi.org/10.1145/3528579.3529179
- Brooke Ryan, **Adriana Meza Soria**, Kaj Dreef, and André van der Hoek. 2022. Reading to write code: an experience report of a reverse engineering and modeling course. In Proceedings of the ACM/IEEE 44th International Conference on Software Engineering: Software Engineering Education and Training (ICSE-SEET '22). Association for Computing Machinery, New York, NY, USA, 223–234. https://doi.org/10.1145/3510456.3514164
- **A. M. Soria** and A. Van Der Hoek, "The Design of a Study Concerning the Capture of Important Design Bits at the Whiteboard," 2021 ACM/IEEE International Conference on Model Driven Engineering Languages and Systems Companion (MODELS-C), Fukuoka, Japan, 2021, pp. 390-399, doi: 10.1109/MODELS-C53483.2021.00062.
- **Adriana Meza Soria**. 2020. KNOCAP: capturing and delivering important design bits in whiteboard design meetings. In Proceedings of the ACM/IEEE 42nd International Conference on Software Engineering: Companion Proceedings (ICSE '20). Association for Computing Machinery, New York, NY, USA, 194–197. https://doi.org/10.1145/3377812.3381397

- **A. Meza Soria** and A. van der Hoek, "Collecting Design Knowledge through Voice Notes," 2019 IEEE/ACM 12th International Workshop on Cooperative and Human Aspects of Software Engineering (CHASE), 2019, pp. 33-36, https://dl.acm.org/citation.cfm?id=3338726
- **A. Meza Soria** and A. van der Hoek, "Toward Collecting and Delivering Knowledge for Software Design at the Whiteboard," 11th International Workshop on Cooperative and Human Aspects of Software Engineering (CHASE), 2018, pp. 108-109, https://ieeexplore.ieee.org/abstract/document/8445548

SELECT PROJECTS

- **AI SE Agents (IBM | MIT-IBM AI Watson Lab | AI Models Engineering)** 2024-present
  An LLM able to solve GitHub issues end-to-end.
- **Synthetic Data Library (IBM | MIT-IBM AI Watson Lab | AI Models Engineering)** 2024-present
  A friendly library to generate synthetic data with WizardLM, WizardCoder, and other algorithms.
- **API Pack (IBM | MIT-IBM AI Watson Lab | AI Models Engineering)** 2023-present
  A code instruction dataset to improve LLMs ability to generate API calls.
- **Software Maintenance Meetings (UCI | SDCL)** Summer 2022
  Single case study of software development meetings.
- **Internship mini-project (IBM | MIT-IBM AI Watson Lab | APT)** Summer 2021
  Architecture design and development of a service to leverage ML models for product demand forecasting.
- **KNOCAP (UCI)** 2018–Present
  A suite of tools to collect important design bits from developers' conversations during whiteboard design meetings.
- **Nana Stories (AMIA | Design Competition) – 2nd at AMIA student design competition.** 2018–2019
  An Alexa skill that offers in-home exercises for children who require speech and language therapy.

VOLUNTEER WORK

- Mexico Graduate Research Education Program, UC Irvine (member) 2018–present
- I-SURF summer program, UC Irvine (mentor) 2019
- APPCamp summer program, UC Irvine (speaker) 2019
- ExploreCSR workshop (Google sponsored workshop), CSULB and UC Irvine (mentor) 2019

SKILLS

Technologies

- Programming languages: Python, Java, C#, Delphi, JavaScript
- Database: MySQL, SQL Server, Oracle, PostgreSQL
- IDEs: VS Code, Eclipse, RAD XE5, Android Studio, and XCode, PyCharm
- Data science tools: Jupyter Notebook, pandas, matplotlib
- Sketching and modeling: Visio, StartUML, Moqups, Figma
- Project management: Trello and Target Process
- Code repositories: GIT, TSF (Microsoft), and StarTeam
- Word editors: LATEX, Microsoft Word

Languages

- English (fluent), Spanish (native speaker)

SOCIAL NETWORKS

LinkedIn: https://www.linkedin.com/in/adriana-meza-soria-52799961
ReserachGate:https://www.researchgate.net/profile/Adriana-Meza-Soria
GoogleScholar: https://scholar.google.com/citations?user=BpMQCb4AAAAJ&hl=en