Mayara Costa Figueiredo

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Education

2016-2021	**PhD in Informatics,** University of California, Irvine, United States (GPA: 4/4)
	Dissertation: Data Work and Data Tracking Technologies in Fertility Care: A Holistic Approach
	Committee: Yunan Chen (advisor), Kai Zheng, Melissa Mazmanian, Daniel Epstein, and Stephen Schüeller
2009-2011	**MSc in Computer Science,** Universidade Federal do Pará, Brazil (GPA: 3.5/4)
	Specialization: Software Engineering / CSCW
	MS thesis: An Empiric Study About Information Technology Architects: Implications to Software Architecture Research
	Committee: Cleidson R.B. de Souza (advisor) Tayana U. Conte, and Rafael Prikladnicki
2004-2008	**BSc in Computer Science,** Universidade Federal do Pará, Brazil (GPA: 3.84/4)
	Specialization: Software Engineering / CSCW
	Capstone project: Support to Traceability Based Impact Analysis in Distributed Software Development
	Committee: Cleidson R.B. de Souza (advisor), Carla A.L. Reis, and Sandro Bezerra

Research Interests

Human-Computer Interaction (HCI), Computer-Supported Cooperative Work (CSCW), Health Informatics, Patient-Generated Health Data, Personal Informatics, Information Seeking, Fertility Tracking, Social Computing

Publications

Full Journal Papers

[J10]   Elizabeth Victoria Eikey, Clara Marques Caldeira, **Mayara Costa Figueiredo**, Yunan Chen, Jessica L. Borelli, Melissa Mazmanian, Kai Zheng (2021). Beyond Self-Reflection: Introducing the Concept of Rumination in Personal Informatics. Personal and Ubiquitous Computing, 1-16.

[J9]   **Mayara Costa Figueiredo**, Thu Huynh, Anna Takei, Daniel A. Epstein, Yunan Chen. 2021. Goals, Life Events, and Transitions: Examining Fertility Apps for Holistic Health Tracking. The Open Journal of the American Medical Informatics Association (JAMIA Open).

[J8]   Clara Caldeira, **Mayara Costa Figueiredo**, Lucy Dodakian, Cleidson R.B. de Souza, Steven C. Cramer, Yunan Chen. 2021. Towards Supporting Data-Driven Practices in Stroke Telerehabilitation Technology. Proc. ACM Hum.-Comput. Interact., CSCW.

[J7]   Daniel A. Epstein, Clara Caldeira, **Mayara Costa Figueiredo**, Lucas M. Silva, Xi Lu, Lucretia Williams, Jong H. Lee, Qingyang Li, Simran Ahuja, Qiuer Chen, Craig Hilby, Sazeda Sultana, Payam D. Yari, Elizabeth V. Eikey,

Yunan Chen. 2020. Mapping and Taking Stock of the Personal Informatics Literature. ACM Interactive, Mobile, Wearable and Ubiquitous Technologies.

[J6] **Mayara Costa Figueiredo**, H. Irene Su, Yunan Chen. 2020. Using Data to Approach the Unknown: Patients' and Healthcare Providers' Data Practices in Fertility Challenges. Proc. ACM Hum.-Comput. Interact., CSCW. **Honorable Mention Award** – top 5% papers (1000 papers total).

[J5] Mustafa I. Hussain, **Mayara Costa Figueiredo**, Brian D. Tran, Zhaoyuan Su, Stephen Molldrem, Elizabeth V. Eikey, Yunan Chen. 2020. A Scoping Review of Qualitative Research in JAMIA: Past Contributions and Opportunities for Future Work. Journal of the American Medical Informatics Association (JAMIA).

[J4] **Mayara Costa Figueiredo** and Yunan Chen. 2020. Patient- Generated Health Data: Dimensions, Challenges, and Open Questions. Foundations and Trends® in Human–Computer Interaction: Vol. 13, No. 3, pp 165–298. DOI: 10.1561/1100000080

[J3] **Mayara Costa Figueiredo**, Clara Caldeira, Elizabeth Victoria Eikey, Melissa Mazmanian, and Yunan Chen. 2018. Engaging with Health Data: The Interplay Between Self-Tracking Activities and Emotions in Fertility Struggles. Proc. ACM Hum.-Comput. Interact. 2, CSCW, Article 40 (November 2018), 20 pages. (acceptance rate: 26%) DOI:https://doi.org/10.1145/3274309

[J2] **Mayara Costa Figueiredo**, Clara Caldeira, Tera L. Reynolds, Sean Victory, Kai Zheng, and Yunan Chen. 2017. Self-Tracking for Fertility Care: Collaborative Support for a Highly Personalized Problem. Proc. ACM Hum.-Comput. Interact. 1, CSCW, Article 36 (November 2017), 21 pages. (acceptance rate: 27%) DOI:https://doi.org/10.1145/3134671

[J1] **Mayara Costa Figueiredo**, Cleidson R.B. de Souza, Marcelo Z. Pereira, Rafael Prikladnicki, Jorge L.N. Audy. 2014. Knowledge Transfer, Translation and Transformation in the Work of Information Technology Architects. Information and Software Technology, 56(10), 1233-1252. DOI: https://doi.org/10.1016/j.infsof.2014.04.001

Full Conference Papers

[C7] **Mayara Costa Figueiredo**, Yunan Chen. 2021. Health Data in Fertility Care: An Ecological Perspective. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (pp. 1-17). **Honorable Mention Award** – top 5% papers.

[C6] Zhaoyuan Su, **Mayara Costa Figueiredo**, Jueun Jo, Kai Zheng, Yunan Chen. 2020. Analyzing Description, User Understanding and Expectations of AI in Mobile Health Applications. American Medical Informatics Association Annual Symposium.

[C5] **Mayara Costa Figueiredo**, Clara Caldeira*, Yunan Chen, Kai Zheng. 2017. Routine Self-Tracking of Health: Reasons, Facilitating Factors, and the Potential Impact on Health Management Practices. American Medical Informatics Association Annual Symposium. **3rd place in the AMIA Student Competition** (68 submissions total). *Mayara Costa Figueiredo and Clara Caldeira are co-first authors*

[C4]   **Mayara Costa Figueiredo**, Cleidson R.B. de Souza, Marcelo Z. Pereira, Rafael Prikladnicki, Jorge L.N. Audy. 2012. On the Role of Information Technology Systems Architects. 18th Americas Conference on Information Systems, 2012, Seattle.

[C3]   Marcelo Z. Pereira, Jorge L.N. Audy, Rafael Prikladnicki, **Mayara Costa Figueiredo**, Cleidson R.B. de Souza. 2011. SOA Practices and Patterns Applied in Global Software Development. In: International Conference on Enterprise Information Systems, Beijing, China.

[C2]   **Mayara Costa Figueiredo**, Cleidson R.B. de Souza. 2009. Supporting Impact Analysis Activities in Distributed Software Development. XXXV Latin-American Conference on Informatics, Pelotas, Brazil.

[C1]   Janne Y.Y. Oeiras, David L.M. Bentolila, and **Mayara Costa Figueiredo**. 2008. Heva: A Support Tool for Heuristic Evaluation for Web Systems. In Proceedings of the VIII Brazilian Symposium on Human Factors in Computing Systems (IHC '08). Sociedade Brasileira de Computação, BRA, 136–145.

Extended Abstracts and Workshop Publications

[P6]   **Mayara Costa Figueiredo.** H. Irene Su, Yunan Chen. 2020. An Evaluation of Commercial Fertility Apps: Algorithmic Predictions and Users' Perceptions. In: American Society for Reproductive Medicine Scientific Congress. Late Breaking Abstract Poster.

[P5]   **Mayara Costa Figueiredo**, Mustafa I. Hussain, Elizabeth A. Ankrah, Yunan Chen. 2019. Powered by AI: Analyzing the Influence of Artificial Intelligence Claims in Fertility Self-Tracking. Workshop: Identifying Challenges and Opportunities in Human–AI Collaboration in Healthcare. In CSCW 2019.

[P4]   Cleidson R.B. de Souza, **Mayara Costa Figueiredo**, Milena N.M. Ferreira, Fagner L. Pantoja. 2013. An Experience in Integrating Design Thinking and Agile Methodologies for Software Development. Forum in Education in Software Engineering, Brasília, Brazil.

[P3]   **Mayara Costa Figueiredo**, Cleidson R.B. de Souza. 2012. Wolf: Supporting Impact Analysis Activities in Distributed Software Development. Proceedings of the 5th International Workshop on Co-operative and Human Aspects of Software Engineering (CHASE'12). In ICSE 2012.

[P2]   **Mayara Costa Figueiredo**, Cleidson R.B. de Souza. 2010. An Empirical Study About Software Architects. Workshop of Theses and Dissertations of the VII Brazilian Symposium on Collaborative Systems, 2010, Belo Horizonte, Brazil.

[P1]   Marcélio Leal, **Mayara Costa Figueiredo**, Cleidson R.B. de Souza. 2008. A Semi-Automatic Approach to Maintaining Traceability Links. Workshop on Requirements Engineering, 2008, Barcelona, Spain.

Doctoral Consortiums

[D2]   **Mayara Costa Figueiredo**. 2020. Self-Tracking for Fertility Care: A Holistic Approach. In Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI EA '20). Association for Computing Machinery, New York, NY, USA, 1–9. DOI:https://doi.org/10.1145/3334480.3375029

[D1]   **Mayara Costa Figueiredo**. 2019. Engaging with Health Data: A Holistic Analysis of Patients, Doctors, and Technology Perspectives in the Context of Fertility Self-Tracking. Doctoral Consortium, the 7th IEEE International Conference on Healthcare Informatics, Xi'an, China.

Honors and Awards

2022	iSchools 2022 Doctoral Dissertation Award Winner
2021	CHI Honorable Mention Award [C7]
2020	CSCW Honorable Mention Award [J6]
2020	Microsoft Research Dissertation Grant ($24,200)
2020	Miguel Velez Endowment Scholarship, University of California, Irvine (one quarter of tuition and stipend)
2020	Roberta Ellen Lamb Endowment Memorial Fellowship ($10,000)
2020	CHI 2020 Doctoral Consortium Travel Funding, Association for Computing Machinery (ACM)
2019	Honorable mention award, the 2019 MaxQDA #ResearchforChange Grant
2019	NSF travel grant to participate in the 2019 IEEE International Conference on Healthcare Informatics
2017	3rd place in the Annual Symposium of American Medical Informatics Association students' competition [C5]
2016	UCI Graduate Dean's Recruitment Fellowship
2016	UCI Chair's Award
2009-2011	Graduate Fellowship, CNPQ, Brazil
2010	DAAD Winter Scholarship (Deutschlandkundlicher Winterkurs), Freie Universität Berlin, Germany
2008	Brazilian Computer Society Prominent Students Award, SBC, Brazil

Professional Experience

2012-present 10 years	Information Technology Analyst and Researcher, Universidade Federal do Pará, Brazil - Developed and maintained components of the academic system (40,000 users) - Java, JSF, JPA, Spring - Performed Team and Project Management activities for 2 years (team: 8 analysts) - Conducted courses about the academic system to faculty and staff
2018 3 months	Summer Intern, Department of Biomedical Informatics, University of California, San Diego - Participated in two research projects , conducting project planning and conceptualization, and quantitative data analysis
2013 2 months	Instructor of Record, Universidade da Amazônia, Brazil - Web Solutions Development (Java, JSF, JPA, Spring), 60h
2011-2012 6 months	Requirements Analyst, Fóton Informática, Brazil - Performed requirements elicitation, analysis, and documentation - Participated in the development of the team software process

Research Experience

2021-present	**Information Seeking in Pregnancy and Delivery Choices in the Amazon** - Project planning and conceptualization, and qualitative data collection and analysis
2019-present	**Understanding Users' Perceptions and Interpretations of Fertility Self-Tracking Tools** - Experiment planning and conceptualization, quantitative and qualitative data collection and analysis - Supervised undergraduate students, developed features of a simulated fertility app
2016-present	**Patient-generated health data and fertility care, UCI, USA** - Conducting qualitative research through interviews, social media analysis, mobile app evaluation, and user studies
2019	**Strong Heart Researcher Needs Study, UCI, USA** - Conducted semi-structured interviews with researchers that have used Strong Heart data
2018	**Identifying patient needs in Hepatic Encephalopathy, UCSD, USA** - Summer intern: project planning and conceptualization, and development of IRB materials
2018	**iCONCUR: Informed consent for clinical data and bio-sample use for research, UCSD, USA** - Summer intern: conducted quantitative data analysis using python and R
2012-2014	**Design thinking and agile methodologies integration, Universidade Federal do Pará, Brazil** - Supervised two undergraduate students
2007-2011	**Design of software architecture in distributed software development, Universidade Federal do Pará, Brazil** - Conducted semi-structured interviews in 9 software companies - Analyzed qualitative data using Grounded Theory techniques
2008-2009	**Leveraging software traceability using the UIMA framework, Universidade Federal do Pará, Brazil** - Performed unstructured information management, requirements traceability, and impact analysis - Developed Wolf, a tool to support semi-automatic requirements traceability
2006-2007	**Laboratory of interactive and collaborative technologies, Universidade Federal do Pará, Brazil** - Performed Heuristic Evaluations, developed a tool for Heuristic Evaluation (Heva), conducted acceptability tests of Heva (the tool was used for 2 years in the University HCI course) - Developed a contributions module for a Brazilian e-learning environment (Teleduc) - Performed social network analysis in open-source projects

Teaching Experience

Instructor of Record

2013 (60h)	Web Solutions Development (Java, JSF, JPA, Spring), Universidade da Amazônia, Brazil

Teaching Assistant

2019, 2020	Interactive Technology Studio (Master level), University of California, Irvine, USA

2018, 2020	User Experience (Master level), University of California, Irvine, USA
2019	Project in Ubiquitous Computing, University of California, Irvine, USA
2018	Introduction to Medical Informatics, University of California, Irvine, USA
2018	Project in the Social and Organizational Impacts of Computing, University of California, Irvine, USA. **Lectured 2 classes**: Fieldnotes and Discourse Analysis
2017	Introduction to Software Engineering, University of California, Irvine, USA
2010	Object-oriented Programming, Universidade Federal do Pará, Brazil
2007	Computer Theory, Universidade Federal do Pará, Brazil
2006	Formal Languages and Automata, Universidade Federal do Pará, Brazil

Other teaching experiences

| 2013-2015 | SIGAA System training - Universidade Federal do Pará, Belém, Brazil |

Talks and Guest Lectures

Invited Talks

2022	Data Work in Healthcare: Healthcare Providers' and Patients' Perspectives Symposium on Computer-Human Interaction for Work (CHIWORK), October 2022
2021	Data Work in Fertility Care: Individual, Technological, and Social Perspectives Santa Clara University, February 2021 Virginia Tech, February 2021 University of Victoria, April 2021
2021	Online A/B Testing Santa Clara University, February 2021
2020	Data Work in Fertility Care: Individual, Technological, and Social Perspectives University of Michigan, November 2020
2020	Examining Fertility Apps for Holistic Health Tracking. Invited talk for the UCI Summer Undergraduate Research Fellowship on the Internet of Things (SURF-IoT) program, UCI, USA
2019	Engaging with health data in the context of fertility self-tracking. Invited talk for the UCI Summer Undergraduate Research Fellowship on the Internet of Things (SURF-IoT) program, UCI, USA

Guest Lectures

| 2022 | Menstrual Tracking Apps. Guest lecture for IS 698/800 - Digital Health Disparities, UMBC, USA |
| 2020 | Health and the Internet: the case of online health communities. Guest lecture for ICS3 - Internet Technologies and Their Social Impact, UCI, USA |

| 2014 | Grounded Theory. Guest lecture for Research Methods. Universidade Federal do Pará, Brazil |

Other Presentations

2019	Powered by AI: Analyzing the Influence of Artificial Intelligence Claims in Fertility Self-Tracking. Workshop presentation at CSCW, Austin, USA.
2019	Engaging with health data: a holistic analysis of patients, physicians, and technology perspectives in the context of fertility self-tracking. Poster presented at the HCIC 2019: The Futures of Work, Watsonville, USA.
2019	Engaging with health data: a holistic analysis of patients, doctors, and technology perspectives in the context of fertility self-tracking. Presentation at the 7th IEEE International Conference on Healthcare Informatics, Xi'an, China
2018	Self-Tracking for Fertility Care: Collaborative Support for a Highly Personalized Problem. Presentation at the Brazilian Symposium on Human Factors in Computing Systems, Belém, Brazil.
2017	Self-Tracking for Fertility Care: Collaborative Support for a Highly Personalized Problem. Research Highlight Poster at the Workshop on Interactive Systems in Health Care (WISH), Washington DC, USA

Mentorship

Training

| 2018 | UCI Mentoring Excellence Program |

Graduate Student Committees

| 2022 | Shelbey L Rolison, Ph.D. Communication Studies, UT Austin, USA |
| 2021 | Reinaldo Junior Lopes Cardoso, M.S. Computer Science, UFPA, Brazil |

Student Mentorship

2021	Edward Wu, B.S. Computer Science, UCI, USA
2020	Marawin Chheang, B.S. Software Engineering, UCI, USA
2019	Thu Anh Huynh, B.S. Software Engineering, co-authored [J9], UCI, USA
2019	Anna Rachel Takei, B.S. Informatics, co-authored [J9], UCI, USA
2019	Donggun Lee, Joonyoung Park, and Ye Lin Jeong (International Summer Undergraduate Research Fellowship), UCI, USA
2017-2019	Sean Victory, B.S. Informatics, co-authored [J2], UCI, USA
2013	Milena Ferreira and Fagner Pantoja, B.S. Computer Science undergraduate students, co-authored [P4], UFPA, Brazil

Service and Volunteering

Program Committee (Associate Chair)

2022	ACM CHI Conference on Human Factors in Computing Systems (Subcommittee – Understanding People: Theory, Concepts, and Methods)
2022	ACM International Conference on Supporting Group Work, GROUP

Reviewing

2023	CSCW*, CHI
2022	GROUP, CHI*, TOCHI, DIS, IJMI
2021	CHI*, CSCW*, SBSC, JAMIA
2020	NordiCHI, ECSCW Posters & Demos, CSCW*, CHI Late Breaking Work, CHI*[2]
2019	CHI Late Breaking Work
2018	AMIA, CSCW

* Special Recognitions for Outstanding Review

Student Volunteer

2018	CSCW student volunteer

Diversity and Inclusion

2019	Google ExploreCSR – Computing to Change the World for the Better: A Research-Focused Workshop for Women (California State University, Long Beach). Served as research project mentor and panelist
2018	Grad Interconnect: International student peer mentor at University of California, Irvine
2018	Diversity in Leadership Summit – California State Fullerton. Served as "speed mentor" to undergraduates underrepresented in engineering and computer science

Media Coverage

Jul-2022	The Risk and Opportunity of Online Fertility Groups The Atlantic (Maggie Mertens) https://www.theatlantic.com/culture/archive/2022/07/online-fertility-forums-reproductive-health-care-gaps/670592/
Jul-2022	Introducing: Clue Conceive - Your trusted guide through conception Eve Lepage, MSN, RN, and Marta Vuković https://helloclue.com/articles/trying-to-conceive/introducing-clue-conceive
Jun-2022	11 of the best apps for fertility tracking and predicting for 2022 Medical News Today (Hayley Osborne and Amanda Kallen, MD)

https://www.medicalnewstoday.com/articles/317505

Dec-2018   For many women, tracking their fertility can be an emotional whirlwind

The Conversation (Mayara Costa Figueiredo, Yunan Chen)

https://theconversation.com/for-many-women-tracking-their-fertility-can-be-an-emotional-whirlwind-106439

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