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Google Scholar: <https://scholar.google.com/citations?user=77kOUvYAAAAJ&hl=en>

PRAISE Lab: <http://www.cs.columbia.edu/~ansaf/praise/index.html>

RESEARCH INTERESTS

Education, artificial intelligence, machine learning in healthcare, real-world applications.

EDUCATION

INRIA Rennes, France	Machine Learning	Postdoc fellow 2005
University of Orléans, France	Machine Learning	Ph.D. 2003 scholarship from the French government (Région Centre) and industry, (with honors)
University of Orléans, France	Computer Science	M.S. 1999 (with honors)
USTHB Algiers, Algeria	Computer Science	Engineer 1996 (with honors)

EMPLOYMENT

- **2020-present** Department of Computer Science, Columbia University. Senior Lecturer in the Discipline of Computer Science
- **2022-present** Aiphabet, Inc. President and Co-founder.
- **2015-2020** Department of Computer Science, Columbia University. Lecturer in the Discipline of Computer Science
- **2006-2015** Center for Computational Learning Systems(CCLS) Columbia University. Associate Research Scientist
- **2014-2015** Department of Computer Science at Columbia University. Adjunct Professor
- **2004-2005** French National Institute of Computer Science and Control (INRIA) Rennes, France. INRIA Postdoctoral Research Fellow
- **2002-2004** University of Orléans, Computer Science Department and Laboratoire d'Informatique Fondamentale d'Orléans (LIFO). Adjunct Assistant Professor and Researcher
- **1999-2002** University of Orléans, Computer Science Department and Laboratoire d'Informatique Fondamentale d'Orléans (LIFO). Teaching Assistant

EDUCATION ACTIVITIES

1. I have developed with Prof. Verma, with support from CTL, a Logic Learning WebApp to discrete mathematics students to practice proofs using propositional logic laws. <https://logiclearner.ctl.columbia.edu/>.
2. I founded Aiphabet, Inc. a non-profit organization. Aiphabet's mission is an inclusive and beneficial AI education that reaches teens worldwide. Through an online learning platform and a hands-on curriculum, Aiphabet offers comprehensive educational resources and develops teens' confidence in AI. <https://aiphabet.org/>. Examples of material:
 - Promotional video: https://www.youtube.com/watch?v=Cjg1c2_lcDA
 - Introduction to artificial intelligence: <https://www.youtube.com/watch?v=dxBzREE-g5Q>
3. Ethical and Responsible Artificial Intelligence COMS W4710: since Summer 2025
4. Artificial Intelligence COMS W4701: once to twice a year since Fall 2014
5. Discrete Mathematics COMS W3203: once to twice a year since Fall 2015.
6. Instructor in the Online Columbia Engineering Artificial Intelligence certificate program. Designed the curriculum for the introduction to AI, recorded lectures, created quizzes and coding assignments. I also attended evening live discussions for 1.5 hours per week for 4 weeks (Spring 2022 and Fall 2022).
7. Columbia University AI Micromasters on EdX. The micromasters included a set of four courses: Artificial Intelligence, Machine Learning, Robotics and Animation & CGI Motion. The Micromasters attracted nearly half a million learners in total. The AI course I taught attracted close to 250,000 learners from 200 countries and regions around the world between 2017 and 2021.
8. Columbia Engineering Summer High School Academic Program for Engineers (SHAPE): offers two 3-week sessions. I taught Computer Science and Programming in Python during the summer 2017. I designed the minesweeper coding assignment that has been used ever since as a project in this program.
9. Introduction to Computing for engineers and applied sciences ENGIE1006: Fall 2016.
10. EdX Data Science and Analytics XSeries DS102X: Spring 2016.
11. Data Science Capstone & Ethics ENGIE4800: Spring 2016.
12. Introduction to Data Science COMS 4242: Spring 2015.
13. Machine Learning for Data Science COMS 4721: Spring 2014.
14. Advanced Machine Learning COMS 6772 (two lectures - 4h - Fall 2008).
15. University of Orléans (France): courses on data mining, operating systems, discrete mathematics, databases, computer programming.

SERVICE

- Member of the undergraduate and masters curricula committees (Spring 2022).
- Masters in data science (MSDS Academic Committee at DSI) (since Spring 2020).
- Barnard faculty meetings: Attends to coordinate the activities between the CS department and the CS department at Barnard (since Spring 2022).
- Academic Advisor for Columbia College students (since Fall 2016).
- Member of the Computer Science Department Academic Committee (Since Spring 2016).

- Member of the Computer Science Department Lecturer Hiring Committee (Since Fall 2015 except Fall 2022).
- Attends ADI mentoring and Women in CS lunch meetings with CS students (December 2017 and March 26, 2018, March 21, 2023, October 29, December 11, 2024).
- Talk at the CU Engineering Women's Forum on Monday, October 16, 2017.
- Masters applications review (since Fall 2015; I review on average 30 applications per semester).

RECENT TALKS

- **March 12, 2026**
Invited speaker. Demo of LogicLearner. DSI Frontiers: (Fun)damental Uses of AI in Math - Pedagogy Symposia.
- **January 10, 2025**
Invited speaker. Columbia Engineering and Ecole Polytechnique Executive Master Program. "AI in Healthcare: The Promise of AI+Human Collaboration."
- **September 29, 2023**
Invited speaker. Department of Obstetrics & Gynecology Division of Maternal-Fetal Medicine. MFM Research Meeting. "Predicting and Understanding Adverse Pregnancy Outcomes in nuMoM2b."
- **October 8, 2022**
Talk at the Columbia University Science Honors Program. Title: "Introduction to Artificial Intelligence."
- **September 23, 2022**
Talk at the AI certificate immersion experience. Title: "Artificial Intelligence in Healthcare."
- **March 16, 2022**
Talk at the NIH-NICHD Decoding Maternal Morbidity Data Challenge Winners' Webinar. Title: "On Predicting and Understanding Preeclampsia: a Machine Learning Approach"
- **February 24, 2022**
Outreach talk to introduce AI to high school students at the Dalton school, robotics class.
- **Fall 2021**
Girls' Science Day, a free program of hands-on experiments for middle school girls.
<https://www.cs.columbia.edu/2022/giving-girls-the-gift-of-science/>.
- **July 26, 2021**
SEAS Undergraduate featured class for SEAS prospective students: Talk about Discrete Mathematics.
- **February 7, 2021**
Invited speaker and panelist at EAAI-21 AAAI Symposium on Educational Advances in Artificial Intelligence. Title: "Teaching AI: An Online Approach."
- **April 9, 2021**
Invited speaker at Society of Women Engineers. Title: "My Computer Science Journey."
- **May 18, 2021**
Invited speaker at 2U, for SEAS AI Certification Webinar. Title: "Artificial Intelligence."
- **May 17, 2019**
Invited speaker at Berkshire school. Title: "Artificial Intelligence: the current state of the art."
- **March 15, 2019**
Invited speaker at The Emerging Technologies Consortium (ETC), Columbia University CUIT. Title "Introduction to AI."

- **November 20, 2018**
Invited speaker at The Promise of Artificial Intelligence: Present and Future Symposium November 19-21, 2018, Kuwait University, Khaldiya. Title "Taking the Future of Education to the Next Level."
- **December 14, 2017**
Invited speaker at the United Nations on Artificial Intelligence and Inclusion. Title: "AI and Cognitive Computing - a Practical Introduction."
- **November 8, 2017** Keynote speaker at the Global Symposium on Artificial Intelligence and Inclusion - Rio de Janeiro. Title: "AI and the Building of a More Inclusive Society." <https://aiandinclusionsymposium.com/and> <https://aiandinclusion.org/>.
- **April 26, 2017**
Invited speaker at SIPA's Artificial Intelligence (AI) and Data Collection: Policy Implications for Development event.

MEDIA COVERAGE

- **January 2025** I was interviewed and featured in The Muse article on AI education. <https://www.themuse.com/advice/what-is-ai>
- **February 2024** I was interviewed and featured in a Fortune Education article on AI bootcamps. <https://fortune.com/education/articles/ai-bootcamps/>
- **December 7, 2021 and February 2022**
Release: NIH announces winners of the Data Challenge to identify risk factors for first-time pregnancies. <https://www.nichd.nih.gov/newsroom/news/120721-data-challenge-winners>
- **December, 2021**
Wollowski, M. (2021). Engagement during Pandemic Teaching: Report of the Eaai-21 Panel on Teaching Online and Blended AI Courses. AI Magazine, 42(3), 77-78. <https://doi.org/10.1609/aimag.v42i3.15092>
- **February 6, 2020**
Can AI help doctors predict and prevent preterm birth? A machine learning approach promises to help solve the problem. <https://www.engineering.columbia.edu/news/ai-preterm-birth>
- **August 10, 2020**
Learning Tool Predicts Devastating Intestinal Disease in Premature Infants. <https://www.engineering.columbia.edu/press-releases/machine-learning-premature-infants>
- **April 11, 2017**
Interview with Ronaldo Lemos, director of the Institute for Technology & Society of Rio de Janeiro (ITS Rio) and professor of Law & Innovation at Rio's State University. The show is "Expresso Futuro", a prime-time TV show from the Brazilian network Canal Futura. <http://www.futuraplay.org/video/inteligencia-artificial/368898/>
- **February 12, 2017**
Interview at *la tercera*: "The dawn of artificial intelligence". <http://www.latercera.com/noticia/amanecer-la-inteligencia-artificial/>
- **Fall 2015**
Columbia medicine article: S. Conova, Why Mothers Deliver Early And How To Stop It. Columbia Medicine Magazine Volume 35 No. 2, 2016. <http://www.columbiamedicinemagazine.org/issue/fall-2015>
- **Spring 2015**
Columbia Office of the Executive Vice President for Research Newsletter Spring 2015. Page 3.

PATENTS

- **June 10, 2014**

US patent 8,751,421 “Machine Learning for the power grid”. Role: co-inventor.

SELECTED HONORS

- **March 2022:** Talk at the NIH NICHD Decoding Maternal Morbidity Data Challenge Winners’ Webinar.
- **December 2021:** My team with students and researchers from Columbia University and Hunter College, is one of the winners of the National Institutes of Health Decoding Maternal Morbidity Data Challenge.
<https://www.nichd.nih.gov/research/supported/decodingmmdatachallenge>
- **March 2019:** Invited speaker and panelist at EAAI-21 AAAI Symposium on Educational Advances in Artificial Intelligence. Title: “Teaching AI: An Online Approach.” <https://ojs.aaai.org/index.php/aimagazine/article/view/15092>
- **March 2019:** Invited speaker at The Emerging Technologies Consortium (ETC), Columbia University. Title “Introduction to AI.”
- **January 2018**
The Eighth Symposium on Educational Advances in Artificial Intelligence 2018 (EAAI-18) has selected me as one of the EAAI 2018 New and Future AI Educators. The symposium, which was co-located with the 32st Association for the Advancement of Artificial Intelligence (AAAI-18) Conference, was held in New Orleans February 3 and 4, 2018.
- **November 2017:** Keynote speaker at the Global Symposium on Artificial Intelligence and Inclusion - Rio De Janeiro. Title: “AI and the Building of a More Inclusive Society’.”
- **January 2008**
Best paper award (Prix EGC “Meilleur article academique”). Ansaf Salieb-Aouissi, Bert Huang and David Waltz. Vers des Machines a Vecteurs de Support "Actionables": Une Approche Fondee sur le Classement. Toward Actionable Support Vector Machines: A Ranking-based Approach. In *Knowledge Extraction and Management (Extraction et Gestion des Connaissances)* EGC 2008, pp. 285-295 INRIA Sophia Antipolis, France. <http://www-sop.inria.fr/axis/egc08/>

RECENT PROJECTS/GRANTS

- **2026-2030** NIH Grant #1R01HL181498-01 Title: Integrating Multi-omics Data to Understand The Heterogeneity of Preeclampsia and Long-term Postpartum Hypertension. (i) Role: Consortium PI: Ansaf Salieb-Aouissi. Lead PI: Nathan Blue (ii) NIH (NHLBI) (iii) 12/2025-12/2030 (iv) Total budget \$2,545,324 (Columbia sub-award around \$33K per year) (vi) University of Utah.
- **2019-2023** NIH-NLM Grant #3R01LM013327-02S1 Title: SCH: Prediction of Preterm in Nulliparous Women. (i) Multiple PI: Ansaf Salieb-Aouissi (Lead PI) (ii) NIH (iii) 9/1/2019-8/31/2023 (iv) \$1M (vi) SEAS.
- **2020-2021** NIH-NLM Grant #5R01LM013327-02 Title: SCH: Prediction of Preterm in Nulliparous Women. Supplement. (i) Multiple PI: Ansaf Salieb-Aouissi (Lead PI) (ii) NIH (iii) 08/01/2020 - 07/31/2021 (iv) \$172,531 (vi) SEAS.
- **2021-2022** CTL grant. Title: A Fast and Effective AI Approach for Student Feedback in Proof-Based Computer-Science Courses. (i) Co-PI: Ansaf Salieb-Aouissi, PI: Nakul Verma (ii) Columbia CTL (iii) 08/01/2021-07/31/2022 (iv) \$15,000 (vi) SEAS.

- **2020-2021** CTL grant. Title: A Fast and Effective AI Approach for Student Feedback in Proof-Based Computer-Science Courses. (i) Co-PI: Ansaf Salieb-Aouissi, PI: Nakul Verma (ii) Columbia CTL (iii) 08/01/2020-07/31/2021 (iv) \$18,000 (vi) SEAS.
- **2019-2020** Spring 2019 Alliance Joint Project Grant: Collaboration with Nakul Verma and Researchers at Ecole Polytechnique Paris. (Role: Principal Investigator). Topic: discovering physics laws with machine learning. (i) PI: Ansaf Salieb-Aouissi, (ii) Columbia Alliance, (iii) 2019-2020, (iv) \$15K, (v) SEAS.
- **2020-2021** Google TensorFlow. AI4Kids, Creating AI curriculum for pre-college students. (i) PI: Ansaf Salieb-Aouissi, (ii) Google, (iii) 7/1/2020-6/30/2021, (iv) \$20K, (v) SEAS.
- **Spring 2017** Provost Hybrid Learning Course Redesign and Delivery Award. Title: “Adding a Chatbot to answer FAQs in Massive Open Online Courses.” (Role: Principal Investigator).
- **September 2014 - August 2017**
“EAGER: Collaborative Research: Advanced Machine Learning for Prediction of Preterm Birth” Funded by the National Science Foundation (Role: Principal Investigator).
http://www.nsf.gov/awardsearch/showAward?AWD_ID=1454855
- **December 2015 - January 2017**
“Deep Content Classification” Funded by SAP SE – Germany (Role: Principal Investigator).
- **April 2015 - June 2016**
“Optimal Path to Knowledge” Funded by Pearson Education, Center for Educator Learning & Effectiveness (Role: Principal Investigator).
- **September 2014 - June 2015**
“Media Portrayal of Teachers” Funded by Pearson Education, Center for Educator Learning & Effectiveness (Role: Principal Investigator).
- **June - September 2014**
“Reinforcement learning to develop an adaptive stochastic controller for optimizing energy consumption in buildings.” PI: Roger Anderson. Role: Research Scientist.
- **July 2013 - September 2013**
National Science Foundation. RI: Medium: Collaborative Research: From Text to Pictures (Role: Research Scientist; PIs: Owen Rambow & Julia Hirschberg).
- **January 2013 - December 2013**
Naval Postgraduate School grant “Leveraging Structural Characteristics of Interdependent Networks to Model Non-linear Cascading Risks” in response to NPS-BAA-12-002. (Role: Consultant)
- **2011- 2013**
Principal Investigator of “Understanding Baby Colic via Machine Learning” project involving CCLS and Columbia University Medical School. This project funded starting April 2011 by a Research Initiatives in Science and Engineering (RISE) funding from the Columbia University Executive Vice President for Research, (Role: Principal Investigator).
- **2009-2010**
Columbia University, Alliance Grant for Faculty Joint Project travel grant. “Supervised Ranking: A Distance-based Approach” PI Ansaf Salieb-Aouissi (Columbia University) and Frank Nielsen (Ecole Polytechnique, Paris).
<http://www.columbia.edu/cu/alliance/research.html> (Role: Principal Investigator).
- **2010- 2012**
Member of the Smart Grid project, funded by the US Department of Energy (Role: Research Scientist; PI: Roger Anderson).
- **2006-2010**
Member of the *CALM project* involving CONSOLIDATED EDISON OF NEW YORK and CCLS (Columbia University). This collaboration aims at developing and applying advanced Artificial Intelligence and Machine Learning methods toward a modern grid technology to improve public safety and system reliability. (Role: Research Scientist; PI: Roger Anderson)

- **2008-2010**

Member of the *Epilepsy project* involving CCLS and the Medical school (Columbia University). This collaboration aims at developing an “Early warning” device to allow epilepsy patients to live a more normal life. This project was funded by Research Initiatives in Science and Engineering (RISE) at Columbia University. (Role: Research Scientist; PI: David Waltz)

- **2010**

Member of the *Epilepsy project* involving CCLS and Columbia University Medical School. This project was funded by the Epilepsy Foundation (Role: Research Scientist; PI: Catherine Schevon).

- **2004-2005**

Member of the *SACADEAU project* involving IRISA-INRIA and INRA (French Institute for Agronomy Research) in France. This project aims at “Building a Knowledge Acquisition System for Decision-Aid to Improve Stream-water Quality”. (Role: Postdoc)

- **2003-2004**

Member of the project “French-Russian Research Hub for the Search and Discovery of Super-Large Metallic Deposits”. It is a collaboration between the French Geological Survey BRGM and the Russian Academy of Sciences. This collaboration was supported by a NATO Science Program. (Role: PhD student)

- **2000-2004**

During my Masters and my Ph.D. thesis on “Data Mining in Geographic Information Systems (GIS): Application to the Andes Cordillera Mineral Deposits” I was a member of a collaboration between the University of Orleans in France and the *French Geological Survey (BRGM) Service of Mineral Resources*. (Role: PhD student)

PROFESSIONAL ACTIVITIES

Advising, PC Membership, Reviewing, and Entrepreneurship:

- July 2022 - Present: President and co-founder of Aiphabet, Inc. <https://www.aiphabet.org>
- February 2023: Reviewer and content advisor for the GBH, Boston’s PBS station, which produces the PBS science television program NOVA for middle and high school educational resources.
- Invited to give a 3-day bootcamp on AI at the Columbia Global Center Tunis for the Summer 2023.
- PC member/reviewer: Paediatric and Perinatal Epidemiology, EAAI, MLHC, NIPS, AAAI, ICML, IJCNN, IJCAI, ECML/PKDD, SIAM Data Mining, DMKD, and TKDE.
- Associate Editor of the Springer Journal Signal, Image and Video Processing 2016-2017.
- Local arrangement committee member for the International Joint Conference for Artificial Intelligence IJCAI 2016 New York City. Website chair. <http://ijcai-16.org/>

MAJOR PUBLICATIONS

Note: Student authors are underlined>.

- **Journals and Book Chapters**

- [J16] Development and validation of a prediction tool to optimize antenatal corticosteroid timing in patients at risk of spontaneous preterm birth.
Moti Gulersen, Adam Lin, Ansaf Salieb-Aouissi, Anita Raja, Robert M. Silver, William A. Grobman, Lynn M. Yee, Judith H. Chung, Hyagriv N. Simhan, Ashley N. Battarbee, Cynthia Gyamfi-Bannerman, Vincenzo Berghella, David M. Haas
Pregnancy, 2: e70217.
<https://doi.org/10.1002/pmf2.70217>

- [J15] Amogh Inamdar, Uzay Macar, Michel Vazirani, Michael Tarnow, Zarina Mustapha, Natalia Dittren, Sam Sadeh, Nakul Verma, **Ansaf Salleb-Aouissi**
LogicLearner: A Tool for the Guided Practice of Propositional Logic Proofs.
Submitted November 2024, Revised October 2025. AI in Education journal (AIEDU).
<https://logiclearner.csl.columbia.edu/>
<https://doi.org/10.48550/arXiv.2503.19280>
- [J14] Khan, Raiyan R., Rafael F. Guerrero, Ronald J. Wapner, Matthew W. Hahn, Anita Raja, **Ansaf Salleb-Aouissi**, William A. Grobman et al.
Genetic polymorphisms associated with adverse pregnancy outcomes in nulliparas
Scientific Reports 14, no. 1 (2024): 10514.
- [J13] Adam (Yun Chao) Lin, Daniel Mallia, Andrea Ogilvie Clark-Sevilla, Adam Catto, Alisa Leshchenko, David M. Haas, Ronald Wapner, Itsik Pe'er, Anita Raja, and **Ansaf Salleb-Aouissi**
A Comprehensive and Bias-Free Machine Learning Approach for Risk Prediction of Preeclampsia with Severe Features in a Nulliparous Study Cohort
BMC Pregnancy Childbirth 24, 853 (2024).
<https://doi.org/10.1186/s12884-024-06988-w>
- [J12] Andrea Ogilvie Clark-Sevilla, Arnav Saxena, Adam (Yun-Chao) Lin, Qi Yan, Itsik Pe'er, Anita Raja, and **Ansaf Salleb-Aouissi**
Diving into CDC pregnancy data in the United States: longitudinal study and interactive application.
Published in JAMIA Open, 2024 Mar 20;7(1):ooae024. doi: 10.1093/jamiaopen/ooae024. PMID: 38516346; PMCID: PMC10955523.
- [J11] Qi Yan, Rafael Guerrero Raiyan Khan, Andy Surujnarine, Ronald Wapner, Matthew Hahn, Anita Raja, **Ansaf Salleb-Aouissi**, William Grobman, Hyagriv Simhan, Nathan Blue, Robert Silver, Judith Chung, Uma Reddy, Predrag Radivojac, Itsik Pe'er, David Haas, (2023). Searching and visualizing genetic associations of pregnancy traits by using GnuMoM2b. Published in Genetics. 225. 10.1093/genetics/iyad151.
- [J10] Irene Tang, Daniel Mallia, Qi Yan, Itsik Pe'er, Anita Raja, **Ansaf Salleb-Aouissi**, Ronald Wapner
A Scoping Review of Preterm Birth Risk Factors
Published. American Journal of Perinatology. AJP-23-Mar-0164 PubMed PMID: 37748506.
- [J9] Adam (Yun-Chao) Lin, **Ansaf Salleb-Aouissi** and Thomas Hooven
Interpretable Prediction of Necrotizing Enterocolitis from Machine Learning Analysis of Premature Infant Stool Microbiota. BMC Bioinformatics 23, 104 (2022). <https://doi.org/10.1186/s12859-022-04618-w>
- [J8] Rafael F. Guerrero, Raiyan R. Khan, Ronald J. Wapner, Matthew W. Hahn, Anita Raja, **Ansaf Salleb-Aouissi**, William A. Grobman, Hyagriv Simhan, Robert Silver, Judith H. Chung, Uma M. Reddy, Predrag Radivojac, Itsik Pe'er, David M. Haas Genetic Polymorphisms Associated with Adverse Pregnancy Outcomes in Nulliparas March 2022. <https://www.medrxiv.org/content/10.1101/2022.02.28.22271641v1>
- [J7] Anton Goretsky, Anastasia Dmitrienko, Irene Tang, Nicolae Lari, Owen Kunhardt, Raiyan Rashid Khan, Cassandra Marcussen, Adam Catto, Daniel Mallia, Alisa Leshchenko, Adam (Yun Chao) Lin, Anita Raja, **Ansaf Salleb-Aouissi**, Itsik Pe'err, Ronald Wapner, Cynthia Gyamfi-Bannerman
Data Preparation of the nuMoM2b Dataset
August 2021. <https://www.medrxiv.org/content/10.1101/2021.08.24.21262142v1>
- [J6] **Ansaf Salleb-Aouissi**, Christel Vrain, Cyril Nortet, Xiangrong Kong, Daniel Cassard
QuantMiner for Mining Quantitative Association Rules
Journal of Machine Learning Research Open source software. 14(Oct):3153-3157, 2013.
<https://github.com/QuantMiner/QuantMiner>
- [J5] Ronan Trepos, **Ansaf Salleb-Aouissi**, Marie-Odile. Cordier, Veronique Masson and Chantal. Gascuel
Building actions from classification rules
Knowledge and Information Systems: Volume 34, Issue 2 (2013), Page 267-298.

- [J4] Rebecca J. Passonneau, Vikas Bhardwaj, **Ansaf Salleb-Aouissi** and Nancy Ide
Multiplicity and Word Sense: Evaluating and Learning from Multiply Labeled Word Sense Annotations.
Language Resources and Evaluation 46(2): 219-252 (2012).
- [J3] Cynthia Rudin, David Waltz, Roger Anderson, Albert Boulanger, **Ansaf Salleb-Aouissi**, Maggie Chow, Haimonti Dutta, Philip Gross, Bert Huang, Steve Ierome
Machine Learning for the New York City Power Grid
IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 34, no. 2, pp. 328-345, 2012.
- [J2] **Ansaf Salleb-Aouissi**, C. Vrain
A Contribution to the Use of Decision Diagrams for Loading and Mining Transaction Databases
Fundamenta Informaticae Journal 2007. Volume 78, Number 4, pp. 575-594. IOS Press.
- [J1] Beatrice Duval, **Ansaf Salleb-Aouissi**, Christel Vrain
On the Discovery of Exception Rules: A Survey.
Reviewed **Book chapter** in “Quality Measures in Data Mining” book. In F. Guillet and Howard J. Hamilton editors
Springer’s Lecture Notes in Artificial Intelligence, Volume 43/2007 pp. 77-98. Springer January 2007.

• Conferences

- [C40] Mahdi Arab Loodaricheh, Neh Majmudar, Anita Raja, and **Ansaf Salleb-Aouissi**
Handling Uncertainty in Health Data using Generative Algorithms
Arxiv 2025
<https://arxiv.org/abs/2503.03715>
- [C39] Blake Castleman, Uzay Macar, and **Ansaf Salleb-Aouissi**
Hierarchical Multi-Armed Bandits for the Concurrent Intelligent Tutoring of Concepts and Problems of Varying Difficulty Levels
Deployable RL: From Research to Practice - Reinforcement Learning Conference 2024
<https://openreview.net/forum?id=ag2m818qUm>
- [C38] Yun Chao Lin, Andrea Ogilvie Clark-Sevilla, Rohith Ravindranath, Fthimnir Hassan, Justin L. Reyes, Joseph M. Lombardi, Lawrence G. Lenke, **Ansaf Salleb-Aouissi**
A LUPi distillation-based approach: Application to predicting Proximal Junctional Kyphosis
Published, ACM Conference on Health, Inference, and Learning, MLHC 2024
- [C37] U. Macar, B. Castleman, N. Mauchly, M. Jiang, A. Aouissi, S. Aouissi, X. Maayah, K Erdem, R. Ravindranath, A. Clark-Sevilla, and **A. Salleb-Aouissi**
Teenagers and Artificial Intelligence: Bootcamp Experience and Lessons Learned.
<https://arxiv.org/abs/2312.10067>
- [C36] Sebastian Salazar, Sam Denton, and **Ansaf Salleb-Aouissi**
Counterfactual Explanations for Support Vector Machine Models
arXiv e-prints (2022): arXiv-2212.
- [C35] Thomas Hooven, Adam (Yun-Chao) Lin, and **Ansaf Salleb-Aouissi**
Interpretable Prediction of Necrotizing Enterocolitis from Machine Learning Analysis of Premature Infant Stool Microbiota
Pediatric Academic Societies (PAS) 2022.
- [C34] Automated Symbolic Law Discovery: A Computer Vision Approach. To appear in The Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI-21). Hengrui Xing, **Ansaf Salleb-Aouissi** and Nakul Verma.
<https://www.aaai.org/AAAI21Papers/AAAI-6008.XingH.pdf>
- [C33] Sam Denton and **Ansaf Salleb-Aouissi**.
A Weighted Solution to SVM Actionability and Interpretability arXiv - CS - Machine Learning (IF), Pub Date : 2020-12-06, DOI: arxiv-2012.03372
- [C32] Multiple instance learning for predicting necrotizing enterocolitis in premature infants using microbiome data. Thomas Hooven, Adam Lin, **Ansaf Salleb Aouissi**
April 2020, pp 99-109. CHIL '20: Proceedings of the ACM Conference on Health, Inference, and Learning 2020.

- [C31] Jongoh Jeong, Do Hyung Kwon, Min Joon So, Anita Raja, Shivani Ghatge, Nicolae Lari, **Ansaf Salleb Aouissi**
Using Privileged Information to Improve Prediction in Health Data: A Case Study.
NeurIPS 2019 Workshop on Information Theory and Machine Learning.
- [C30] Ilia Vovsha, **Ansaf Salleb-Aouissi**, Anita Raja, Axinia Radeva, Ashwath Rajan, Alex Rybchuk, Thomas Koch,
Yiwen Huang, Hatim Diab, Ashish Tomar, and Ronald Wapner
Using Kernel Methods and Model Selection for Prediction of Preterm Birth
Machine Learning for Healthcare 2016 JMLR conference track proceedings. August 2016.
- [C29] Faiza Khan Khattak, **Ansaf Salleb-Aouissi** and Anita Raja
Accurate Crowd-labeling using Item Response Theory
In Collective Intelligence Conference 2016.
- [C28] Antonio Moretti, Kathy McKnight and **Ansaf Salleb-Aouissi**
Application of Sentiment and Topic Analysis to Teacher Evaluation Policy in the U.S..
Educational Data Mining (EDM) conference 2015.
- [C27] **Ansaf Salleb-Aouissi**, Christel Vrain and Daniel Cassard
Learning Characteristic Rules in Geographic Information Systems.
The 9th International Web Rule Symposium (RuleML) 2015.
- [C26] Ilia Vovsha , Ashwath Rajan , **Ansaf Salleb-Aouissi**, Anita Raja , Axinia Radeva, Hatim Diab, Ashish Tomar and
Ronald Wapner
Predicting preterm birth is not elusive: machine learning paves the way to individual wellness
*AAAI Spring Symposium – Big Data Becomes Personal: Knowledge into Meaning - For Better Health, Wellness
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