

Bereket Abera YILMA

31 Porte de France, L-4360 Esch-Sur-Alzette (Luxembourg)

Phone: (+352) 621 391, 628 , (+352) 275 888 2887 (direct: Office)

Email: byilmalux@gmail.com, bereket.yilma@list.lu

Homepage: bekyilma.github.io

WORK EXPERIENCE

- April 2018 - Present **Research Scientist**
Luxembourg Institute of Science and Technology (LIST)
- July 2017- Mar 2018 **Research Assistant**
FBK(Bruno Kessler Foundation), Trento(Italy)
- Sep 2016 - July 2017 **Research Assistant**
University of Trento, Trento (Italy)
- Jan 2013 – Aug 2015 **Digital Strategist**
Global Media Outreach

EDUCATION

- May 2018 – July 2021 **Doctor of Philosophy**
Computer Science, University of Lorraine, Nancy (France)
- Sep 2015 – Dec 2017 **Master of Science**
Computer Science (Artificial Intelligence), University of Trento, Trento (Italy)
Specializations:
 - Machine Learning
 - Big data and social networks analysis
 - Data Mining
- Aug 2011 – Jul 2014 **Bachelor of Science**
Computer and Information Sciences, University of Gondar, (Ethiopia)
-

PUBLICATIONS

Journal article

- **Bereket Abera Yilma**, Hervé Panetto, and Yannick Naudet."Systemic formalisation of Cyber-Physical-Social System (CPSS): A systematic literature review". In Computers in Industry, Volume 129 :103458, April 2021.

International conferences

- **Bereket Abera Yilma**, Yannick Naudet and Hervé Panetto." Towards a Personalisation Framework for Cyber-Physical-Social System (CPSS)". In the proceedings of the the17th IFAC Symposium on Information Control Problems in Manufacturing(INCOM2021), Budapest, Hungary(Virtual), June 2021.
 - **Bereket Abera Yilma**, Yannick Naudet and Hervé Panetto." Personalisation in Cyber-Physical-Social Systems: A Multi-stakeholder aware Recommendation and Guidance,". In the proceedings of the 29th ACM Conference on User Modeling, Adaptation and Personalization(UMAP '21), June 2021, Utrecht, Netherlands.
 - **Bereket Abera Yilma**, Yannick Naudet and Hervé Panetto."A New Paradigm and Meta-Model for Cyber-Physical-Social Systems," In the proceedings of the 21stIFACWorld Congress in Berlin, Germany, July 2020.
 - **Bereket Abera Yilma**, Najib Aghanda, M. Romero, Yannick Naudet and Hervé Panetto."Personalised Visual Art Recommendation by Learning Latent Semantic Representations,". In the proceedings of the 15th International Workshop on Semantic and Social Media Adaptation and Personalisation(SMAP 2020), Zakynthos, Greece(Virtual)October 2020.
 - **Bereket Abera Yilma**, Hervé Panetto, and Yannick Naudet."A Meta-Model of Cyber-Physical-Social System: The CPSS paradigm to support Human-Machine collaboration in Industry 4.0," In the proceedings of the 20thWorking Conference on Virtual Enterprises(PRO-VE 2019), Turin, Italy, September 2019.
 - **Bereket Abera Yilma**, Yannick Naudet and Hervé Panetto."Introduction to Personalisation in Cyber-Physical-Social Systems," In the proceedings of the 13thOTM/IFAC/IFIPInternational Workshop on Enterprise Integration, Interoperability and Networking(EI2N 2018)Valletta, Malta, October 2018.
 - Yannick Naudet, **Bereket Abera Yilma** and Hervé Panetto."Personalisation in Cyber-Physical and Social Systems: the Case of Recommendations in Cultural HeritageSpaces", In the proceedings of the 13th International Workshop on Semantic and Social Media Adaptation and Personalisation(SMAP 2018)Zaragoza, Spain, September 2018.
 - A Fadhil, G Schiavo, Y Wang, **Bereket Abera Yilma**. "The effect of emojis when interacting with conversational interface assisted health coaching system", In the proceedings of the 12th EAI International Conference on Pervasive Computing Technologies for Healthcare 2018.
-

PROFESSIONAL ACTIVITIES

Reviewing

- Future Generation Computer Systems
- Computing Journal
- 3rd Black in AI Workshop at Neural Information Processing Systems (NeurIPS2019)
- 4th Black in AI Workshop at Neural Information Processing Systems (NeurIPS2020)

PC Member

- 1st International workshop on Business Informatics in Practice (BIIP2020)
- 4th Black in AI Workshop at Neural Information Processing Systems (NeurIPS2020)

SKILLS

Machine learning and cluster computing Frameworks

- Tensorflow, PyTorch, Keras, Apache Spark/Hadoop, scikit-learn, SPaCy, aws and more

Programming Languages

- Python, R, JavaScript, Java, C++, Scala, Shell Scripting, SQL,

Data Visualization

- Plotly, ggplot, Dash, seaborn, matplotlib

DBMS

- MySQL, PostgreSQL, Amazon DynamoDB, MongoDB, Amazon Neptune, Neo4j

Mathematical Optimization

- GUROBI with Python
- PuLP

PROJECTS

- Distributed representation based recommender system for e-markets (Item2vec) - [Research work](#)
 - Patient profiling and physical activity recommender system for CoachAI Platform:- [Research work](#)
 - Data augmentation for health assisting conversational agents: - [Research work](#)
- Master's thesis
- [Constructive preference elicitation and preference learning with Setwise Max-margin for Social choice.](#)
- PhD thesis
- [Personalisation in Cyber-Physical-Social Systems.](#)

CERTIFICATIONS

- Deep Learning Specialization - [Certificate](#)
- Mastering Digital Twins - [Certificate](#)
- Machine Learning Foundations: A Case Study Approach (from University of Washington in Coursera) [Certificate](#)
- Machine Learning: Classification (from University of Washington in Coursera) [Certificate](#)
- Machine Learning: Clustering & Retrieval (from University of Washington in Coursera) [Certificate](#)
- Machine Learning: Regression (from University of Washington in Coursera) [Certificate](#)
- Specialization Machine learning: Build Intelligent Applications (from the University of Washington in Coursera) [Certificate](#)
- Neural Networks and Deep Learning(from Stanford University) [Certificate](#)
- Python Data Structures (from University of Michigan) [Certificate](#)