Chen HE

PhD student
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Born on 1995 in Sichuan, China
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PROFESSIONAL EMPLOYMENT

2019 Mar - Aug: Machine learning trainee, Hubert Curien Laboratory, France.

2018 Jul - Sep: Machine learning trainee, XXII Group, Paris, France.

EDUCATION

2019-22 PhD in Industrial Engineering (applied to Healthcare). Research topic: "mining, understanding, and optimizing medical miscoding behaviors for coding practice improvement."; Thesis director: Prof. Xiaolan Xie; Mines Saint-Etienne, France.

2018-19 A double master's degree (M.S.) in Data and Connected System, Jean Monnet University, France.

2016-19 Master's degree (M.Eng.) in Computer Science with minor in Big Data and Artificial intelligence, Telecom Saint-Etienne, France.

2013-17 Bachelor of Engineering (B.Eng.) in Electronic Science and Technology, Xidian University, China.

RESEARCH AREAS

My research interests mainly lie in data driven approaches applied to healthcare domain, including modeling, performance evaluation and optimization of manufacturing and healthcare systems. The research methods used are mainly from the fields of data mining, machine learning, operation research and mathematical optimization.

More specifically, my works focus on interpretable analysis of those areas and building scalable and effective data driven decision aid tools for them, from theoretical algorithms to practical applications.

REPRESENTATIVE PUBLICATIONS

Conference Proceedings

2021 He, Chen, et al. "A topological and optimization based methodology to identify and correct ICD miscoding behaviors." 2021 IEEE 17th International Conference on Automation Science and Engineering (CASE). IEEE, 2021.

2020 He, Chen, Benjamin Dalmas, and Xiaolan Xie. "ACBI: An Alternating Clustering and Bayesian Inference approach for optimizing medical intervention budget under chance constraints." 2020 IEEE 16th International Conference on Automation Science and Engineering (CASE). IEEE, 2020.

Papers in progress

2022 He, Chen, et al. "A clustering-based optimization approach for chance-constrained medical review budget rationing."

CONFERENCE PARTICIPATION

2021 23-27 Aug, oral presentation, IEEE 17th International Conference on Automation Science and Engineering (CASE), Lyon, France.

2020 20-21 Aug, oral presentation, IEEE 16th International Conference on Automation Science and Engineering (CASE), Online virtual meeting, Hong kong, China.

SELECTED AWARDS AND HONORS

2014 National Encouragement Scholarship, Xidian University.

COURSES TAUGHT

Ecole des Mines de Saint Etienne

2020/2021, Teaching Assistant (TA), Big data and artificial intelligence: an introduction, Master 1, Master's Degree in Health Management & Data Intelligence, 24h.

2020/2021, Teaching Assistant (TA), Signal Processing with Python, Master 1, Master's Degree in Science and Executive Engineering, 18h.

2019/2020, Teaching Assistant (TA), Signal Processing with Python, Master 1, Master's Degree in Science and Executive Engineering, 18h.

ACDEMIC SERVICES

Reviewer: IEEE CASE 2021.

REFERENCES

Dr. Xiaolan XIE (PhD thesis director), Professor and the head of the department of Healthcare Engineering of the Center for Biomedical and Healthcare Engineering, Ecole Nationale Supérieure des Mines (EMSE), Saint Etienne, France.
Tel: +33 4 77 42 66 95, Email: xie@emse.fr

Dr. Benjamin DALMAS (PhD advisor), Assistant Professor at the Center for Biomedical and Healthcare Engineering, Ecole Nationale Supérieure des Mines (EMSE), Saint Etienne, France.
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