

# Jayanta Mandi

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## Summary

PhD Candidate in Machine Learning and Constraint Optimization

Data Scientist at PwC, India (2017-18), Authored publications at reputed journals and conferences

## Education

2018–Present **PhD, machine Learning & Constraint Optimization**, *Vrije Universiteit Brussel*,

Adviser: Prof. dr. Tias Guns, co-head of the Data Analytics Lab,

Area: Data Mining, Machine Learning, Constraint Optimization.

2015–2017 **Masters Degree, Business Analytics**, *GPA: 9.04/10*,

Indian Institute of Management, Calcutta ,

Master's Thesis: Early Warning System to identify Earnings Management in stressed firms.

Adviser: Prof. Ashok Banerjee, Faculty-in-charge, The Financial Research and Trading Laboratory, IIM Calcutta

2009–2013 **Bachelor of Technology, Electronics & Electrical Communication Engineering**,

*Indian Institute of Technology, Kharagpur*, *GPA: 8.14/10*.

## Publications

**Jayanta Mandi** and Tias Guns. Interior Point Solving for LP-based prediction+optimisation In Advances in Neural Information Processing Systems, 2020

Maxime Mulamba, **Jayanta Mandi**, Rocsildes Canoy, Tias Guns. Hybrid Classification and Reasoning for Image-based Constraint Solving In 17th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research, 2020

**Jayanta Mandi**, Emir Demirović, Peter. J Stuckey and Tias Guns. Smart Predict-and-Optimize for Hard Combinatorial Optimization Problems. In AAAI Conference on Artificial Intelligence, 2020, New York, USA

D. Chakrabarti, N. Patodia, U. Bhattacharya, I. Mitra, S. Roy, **J. Mandi**, N. Roy, and P. Nandy. Use of artificial intelligence to analyse risk in legal documents for a better decision support. In *TENCON 2018 - 2018 IEEE Region 10 Conference*, pages 0683–0688, Oct 2018.

Manisha Chakrabarty and **Jayanta Mandi**. *Entropy-Based Consumption Diversity—The Case of India*, pages 519–540. Springer Singapore, Singapore, 2019.

## Coverage in Popular Press

**Ideas for India**, *How to ease Covid-19 lockdown? Forward guidance using a multi-dimensional vulnerability index*, Jayanta Mandi, Manisha Chakrabarty, Subhankar Mukherjee, May 21, 2020.

**Business Standard**, *Earnings management in stressed firms*, A. Banerjee, J. Mandi, D N Mukherjee, July 31, 2017.

## Experience

June 2017– **Data Scientist**, PRICEWATERHOUSECOOPERS.

- November 2019
  - Worked on Conversational Agent, User feedback based learning to improve chat experience
  - Developed framework to quantify risk in legal documents, distributed representations of text using Doc2vec
  - Worked on Deep Learning based OCR to identify Vehicle ID
  - Random Forest model to identify parameters responsible for yield reduction in a steel plant
  - Fast Moving Consumer Goods Visual Analytics Framework to enable better decision making for the management

- November **Instrumentation & Control System Engineer**, BHARAT HEAVY ELECTRICALS LTD..
- 2013–June
  - Supervised the commissioning activities of steam-turbine and compressor at client sites
- 2015
  - Project management and execution by coordinating techno-commercial discussions with all stakeholders

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## Selected Honors & Awards

- 2015 **Endowed with cash scholarship for academic excellence**, (*SGPA > 9.5*), Indian Statistical Institute.
- 2016 **Finalist, Data Science Game**, *1 out of 20 International teams to qualify for the Final.*
- 2007 **NTSE scholarship award**, *Selected through competitive nation-wide examination.*

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## Skillsets

**Programming Languages:** Python,R,C,SQL **Frameworks:** PyTorch, GurobiPy, OR-Tools

**Communication:** Bengali(Native), English(Fluent), French(Elementary), German(Elementary), Hindi(Intermediate)