





# Metaheuristics for Smart Manufacturing 8. Outlook

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合肥学院 南艳湖校区/南2区 计算机科学与技术系 应用优化研究所 中国 安徽省 合肥市 蜀山区 230601 经济技术开发区 锦绣大道99号 Outline



2 Limits



The slides are available at <a href="http://iao.hfuu.edu.cn/155">http://iao.hfuu.edu.cn/155</a>, the book at <a href="http://thomasweise.github.io/aitoa">http://thomasweise.github.io/aitoa</a>, and the source code at <a href="http://www.github.com/thomasWeise/aitoa-code">http://www.github.com/thomasWeise/aitoa-code</a>





# An Introduction to Optimization Algorithms



The contents of this course are available as free electronic book *"An Introduction to Optimization Algorithms"*<sup>[1]</sup> at <u>http://thomasweise.github.io/aitoa</u> in pdf, <u>html, azw3</u>, and <u>epub</u> format, created with our bookbuildeR tool chain.







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3 Summary



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- By now, you have a general idea about the basic principles of metaheuristics and how they can be applied to problems from smart manufacturing.
- They are easy to use and fast to implement.
- But there is so much more, much more can be done!



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- But these are other stories...



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- any algorithm (for non-trivial problems) takes longer for larger inputs...
- This is one of the biggest obstacles for practical applications of metaheuristic optimization, in my opinion.



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- But in an enterprise, even 1% of improvement can mean millions of RMB...



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- I hope this course was useful and interesting to you.
- You can find a much more comprehensive discussion in our book <sup>[1]</sup>.





# 谢谢 Thank you

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