



# Dr. Abderrahman Ait-Ali

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## OVERVIEW

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PhD. in Infra-Informatics.

MSc. in Computer Science & Engineering.

Ing. in Applied Mathematics & Informatics.

## PROFESSIONAL

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### Researcher, Transport Economics

*VTI The Swedish National Road and Transport Research Institute, Sweden*

2021-present

### Research Assistant, Transport Economics

*VTI The Swedish National Road and Transport Research Institute, Sweden*

2019-2021

- Capacity allocation in deregulated railway markets

### PhD Candidate, Transport Science

*KTH The Royal Institute of Technology, Sweden*

2016-2019

- Cost-benefit analysis of commuter train timetables

### Research Engineer, Mathematical Optimization

*KTH The Royal Institute of Technology, Sweden*

2015-2016

- Optimization of train timetables using Lagrangian relaxation

### Research Intern, Production Planning

*ABB Research Center, Germany*

2014-2015

- Optimization of Energy-aware production schedules in steel production plants
- Bi-level optimization in production planning for pulp & paper production

## EDUCATION

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<b>Post doc. Communications &amp; Transport Systems</b> <i>Linköping University - LiU, Sweden</i>	2021-present
<b>PhD. Infra-informatics (cont.)</b> <i>Linköping University - LiU, Sweden</i>	2019-2020
<b>PhD. Transport Science</b> <i>KTH The Royal Institute of Technology, Sweden</i>	2015-2019
<b>MSc. Computer Science &amp; Engineering</b> <i>KTH The Royal Institute of Technology, Sweden</i>	2013-2015
<b>Ing. Applied Mathematics &amp; Informatics</b> <i>Grenoble Institute of Technology - ENSIMAG, France</i>	2011-2013
<b>Prepa. Physics &amp; Engineering</b> <i>Reda Slaoui Preparatory Classes, Morocco</i>	2009-2011

## SELECTED PUBLICATIONS

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12. [A. Ait-Ali](#), et al., “[Evaluating the mix of maintenance activities on railway crossings with respect to life-cycle costs](#)”, *VTI Working Paper* , (2023).
11. [A. Ait-Ali](#), T. Lidén, “[Minimal utilization rate for railway maintenance windows: a cost-benefit approach](#) ”, *European Journal of Transport and Infrastructure Research* , (2022).
10. [A. Ait-Ali](#), J. Eliasson, “[The value of additional data for public transport origin–destination matrix estimation](#)”, *Public Transport* , (2021).
9. [A. Ait-Ali](#), J. Eliasson, “[European Railway Deregulation: An overview of market organization and capacity allocation](#)”, *Transportmetrica A: Transport Science* , (2021).
8. [A. Ait-Ali](#), “[Methods for Capacity Allocation in Deregulated Railway Markets](#)”, *Linköping Studies in Science and Technology. Dissertations* **2101**, (2020).
7. [A. Ait-Ali](#), P. O. Lindberg, J. Nilsson, J. Eliasson, A. Peterson, “[A disaggregate bundle method for train timetabling problems](#)”, *Journal of Rail Transport Planning & Management* **100200**, (2020).
6. [A. Ait-Ali](#), J. Warg, J. Eliasson, “[Pricing Commercial Train Path Requests based on Societal Costs](#)”, *Transportation Research Part A: Policy and Practice* **132**, 452-464 (2020).
5. [A. Ait-Ali](#), “[Integration of Production Scheduling and Energy Management: Software Development](#)”, *Master Thesis* , (2015).

## OTHER PUBLICATIONS

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4. [A. Ait-Ali](#), et al., “[Assessing innovations in High-Speed Rail infrastructure](#)”, *Proceedings of the 2nd International Workshop on High-Speed Rail Socioeconomic Impacts* , (2023).
3. [A. Ait-Ali](#), J. Eliasson, “[Railway capacity allocation: a survey of market organizations, allocation processes and track access charges](#)”, *VTI Working Paper* **1**, (2019).
2. J. Warg, [A. Ait-Ali](#), J. Eliasson, “[Assessment of Commuter Train Timetables Including Transfers](#)”, *Transportation Research Procedia* **37**, 11-18 (2019).
1. [A. Ait-Ali](#), J. Eliasson, J. Warg, “[Measuring the Socio-economic Benefits of Train Timetables Application to Commuter Train Services in Stockholm](#)”, *Transportation Research Procedia* **27**, 849-856 (2017).

## INTERNATIONAL CONFERENCES

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7. Nordic Railway Seminar, Tampere, 2022
6. European conference of the Society for Benefit Cost Analysis, Toulouse, 2019
5. International Conference on Railway Operations Modelling and Analysis, Norrköping, 2019
4. International Conference of Transportation Economics Association, Paris, 2019
3. European Conference on Operational Research, Valencia, 2018
2. European Working Group for Transportation, Budapest, 2018
1. International Conference on Railway Operations Modelling and Analysis, Lille, 2017

## AWARDS

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- 2022 Top 10 in TRAVISIONS Young Researcher competition.
- 2016 Fellowship for MENA Internet Governance Conference, HIVOS.
- 2014 Internship Excellence Award, ABB Research Center in Germany.
- 2013 Merit Grant for Engineering Studies, Grenoble Institute of Technology.
- 2011 #1 Common National Contest - CNC 2011, Moroccan Ministry of Higher Education, Scientific Research and Professional Training.

## SYNERGISTIC ACTIVITIES

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- Board member: Wikimedia MA (Wikipedia in Morocco).
- Alumni: Internet Governance in MENA Region, ICANN, HIVOS Foundation.
- Languages: Tashelhit (Amazigh/Berber), Arabic, French, English and Swedish.
- Photography: Contest organizer and jury (Wiki Loves Monuments).