

## Menkes Hector Louis van den Briel

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### Education

Doctor of Philosophy in Industrial Engineering, Expected 2007  
Arizona State University, Tempe, AZ, USA.

Thesis title: *Models and Algorithms for Automated Planning.*

Master of Science in Econometrics, Spring 2000  
Universiteit Maastricht, Maastricht, Netherlands.

Thesis title: *Algorithms for CDM on Slot Allocation: Slot Swapping and Slot Shifting.*

### Employment

Arizona State University  
Research Assistant  
Dr. Subbarao Kambhampati and Dr. John Folwer. Researched models and algorithms for automated planning problems. Developed an integer programming based domain independent planning system.

Tempe, AZ, USA  
2003–Present

Arizona State University  
Research Assistant  
Dr. Rene Villalobos. Developed analytic and simulation models for airplane boarding. Results were implemented system wide by America West Airlines (now US Airways).

Tempe, AZ, USA  
2002–2003

Arizona State University  
Teaching Assistant/Grader  
Course: Operations Research Techniques/Applications (1 section, 30+ students).  
Course: Deterministic Operations Research Models (1 section, 50+ students).

Tempe, AZ, USA  
2001–2002

ORTEC Systems  
Junior Consultant  
Provided decision support solutions in transportation. Developed and implemented of several extensions to a vehicle routing software package.

Gouda, Netherlands  
2000–2001

Dutch National Aerospace Laboratory  
Research Assistant  
Dr. Marjan van den Akker and Dr. Peter de Waal. Researched models and algorithms for applications in collaborative decision making in air traffic management. Developed algorithms for slot swapping and slot shifting.

Amsterdam, Netherlands  
1999–2000

## Research

### *Refereed journal articles*

1. M.H.L. van den Briel, and S. Kambhampati. 2005. Optiplan: A Planner Based on Integer Programming. *Journal of Artificial Intelligence Research*, Vol. 24, pp. 919-931.
2. M.H.L. van den Briel, J.R. Villalobos, G.L. Hogg, T. Lindemann, and A. Mul. 2005. America West Develops Efficient Boarding Strategies. *Interfaces*, Vol. 35, No. 3, pp. 191-201.
3. P.R. de Waal, M.H.L. van den Briel, and J.M. van den Akker. 2002. Slot swapping Applications for Collaborative Decision Making. *Air Traffic Control Quarterly*, Vol 11, No 1, pp. 65-84.

### *Refereed conference proceedings*

1. M.H.L. van den Briel, T. Vossen, and S. Kambhampati. 2005. Reviving Integer Programming Approaches for AI Planning: A Branch-and-Cut Framework. In *Proceedings of the International Conference on Automated Planning and Scheduling (ICAPS-2005)*, pp. 310-319.
2. M.H.L. van den Briel, R. Sanchez, M.B. Do, and S. Kambhampati. 2004. Effective Approaches for Partial Satisfaction (Over-Subscription) Planning. In *Proceedings of the 24th National Conference on Artificial Intelligence*, pp. 562-569
3. M.H.L. van den Briel, J.R. Villalobos, and G.L. Hogg. The Aircraft Boarding Problem. 2003. In *Proceeding of the 12th Industrial Engineering Research Conference (IERC-2003)*, Nr 2153, CD-ROM.

### *Other publications*

1. M.H.L. van den Briel, S. Kambhampati, and T. Vossen. 2006. Planning with Preferences and Trajectory Constraints by Integer Programming. In *Proceedings of the ICAPS Workshop on Preferences and Soft Constraints in Planning*, pp. ?-?.
2. M.H.L. van den Briel, R. Sanchez, and S. Kambhampati. 2004. Over-Subscription in Planning: A Partial Satisfaction Problem. In *Proceedings of the ICAPS Workshop on Integrating Planning into Scheduling*, pp. 91-98.
3. M.H.L. van den Briel. 2000. Algorithms for CDM on Slot Allocation: Slot Swapping and Slot Shifting. NLR-Memorandum IW-2000-009.

### *Conference presentations*

1. T. Vossen, M.H.L. van den Briel, S. Kambhampati. 2005. A Branch-and-Cut Framework for Artificial Intelligence Planning. *9th INFORMS Computing Society Conference*. Annapolis, Maryland, USA.
2. M.H.L. van den Briel, J.R. Villalobos, and A. Keha. 2004. Improved Group Configurations for Zone/Group Boarding. *INFORMS Annual Meeting 2004*. Denver, Colorado, USA.
3. M.H.L. van den Briel, J.R. Villalobos, and G.L. Hogg. 2003. Efficient Airplane Boarding Strategies. *INFORMS Annual Meeting 2003*. Atlanta, Georgia, USA.
4. P.R. de Waal, M.H.L. van den Briel, and J.M. van den Akker. 2001. Slot Swapping Applications for CDM. *FAA/EUROCONTROL Technical Interchange Meeting*

on *CDM in Air Traffic Flow Management*. Reston, Virginia, USA. (Invited contribution).

## Service

### *Academic service*

- Student representative of the INFORMS Chapters/Fora Committee, 2004–Present.
- Coeditor, OR/MS Tomorrow, the INFORMS student newsletter, 2002–2004.
- Vice President, INFORMS Student Chapter at Arizona State University, 2002.
- Treasurer, MSAV Uros, the student association for track and field in Maastricht, 1998–1999.
- Coeditor, PerVectum, the magazine for econometricians from the University of Maastricht, 1998–1999.

### *Public service*

- Treasurer, Phoenix Chapter of the National Space Society, 2005–Present.
- Treasurer, Mars Society Phoenix Chapter, 2005–Present

## Awards

- Operations Research in Practice Poster Session. First Prize. *INFORMS Annual Meeting* 2003, Atlanta, Georgia, USA, 2003.
- Dutch National Student Champion 4x400m, Groningen, 2000.

## Media coverage

- David Bear and Anya Sostek. June 18, 2006. There's more than one way to fill a plane. *Pittsburgh Post-Gazette*. pp ??.
- Thomas Hayden. June 2006. Now Boarding, Fast. *Wired Magazine*. pp. 32.
- Dave Demerjian. May 9, 2006. Airlines Try Smarter Boarding, *Wired News*. <http://www.wired.com/news/technology/0,70689-0.html>.
- Tom Ramstack. April 23, 2006. Manned mission to 'Mars', *The Washington Times*. pp. A1 (front page).
- Roger Yu. January 10, 2006. Airlines change how they herd us aboard, *USA TODAY*, pp. B1.
- Nicolas Zamiska. November 2, 2005. Plane Geometry: Scientists Help Speed Boarding of Aircraft, *The Wall Street Journal*, pp. A1 (front page).
- Hal Mattern, May 1, 2003. AmWest hopes new boarding procedure will save time for all involved, *The Arizona Republic*, pp. B1.

## References

Please feel free to contact any of my referees.

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