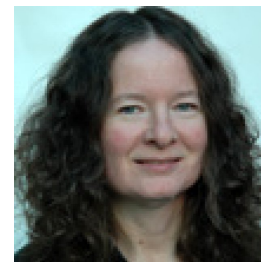


Joan Faye Boyar  
Digital Democracy Centre  
**Email:** joan@imada.sdu.dk  
**Phone:** +4565502338



## Education

Ph.D., Computer Science, University of California, Berkeley, 1983  
M.S., Computer Science, University of California, Berkeley, 1981  
A.B., Mathematics, University of Chicago, 1977

## Academic Positions

Professor, Institut for Matematik og Datalogi, University of Southern Denmark, 2107-present.

Visiting Professor, Department of Computer Science, University of Toronto, fall semester 2017.

Lektor (Associate Professor), Institut for Matematik og Datalogi, University of Southern Denmark, 1992-2017.

Visiting Professor, David R. Cheriton School of Computer Science, University of Waterloo, and Department of Computer Science, University of Toronto, fall semester 2012.

Visiting Associate Researcher, Department of Computer Science, University of California - Irvine, fall semester 2007.

Visiting Faculty Member, Department of Computer Science, University of Toronto, fall semester 2002.

Visiting Associate Professor, Computer Sciences Department, University of Wisconsin - Madison, spring semester 1997.

Lektorvikar (Visiting Associate Professor), Institut for Matematik og Datalogi, Odense University, 1991-1992.

Associate Professor, Department of Mathematical Sciences, Loyola University Chicago, 1990-1991.

Lektorvikar (Visiting Associate Professor), Datalogisk Afdeling, Aarhus University, 1989-90.

Assistant Professor, Department of Computer Science, University of Chicago, 1983-89.

## Publications

### Online Unit Profit Knapsack with Predictions

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### **Cancellation-Free Circuits in Unbounded and Bounded Depth**

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### **Four Measures of Nonlinearity**

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### **The Frequent Items Problem in Online Streaming under Various Performance Measures**

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### **A new variable-sized bin packing problem**

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## **Activities**

### **Paging with Succinct Predictions**

Boyar, J. F. (Guest lecturer)  
1. Feb 2024

### **Digital Democracy Seminar**

Boyar, J. F. (Participant)  
10. Oct 2023 → 11. Oct 2023

### **Invited speaker**

Boyar, J. F. (Guest lecturer)  
31. Aug 2023

### **Talk in Theory Seminar at the Department of Computer Science, University of Toronto**

Boyar, J. F. (Guest lecturer)  
19. May 2023

### **ARCO Workshop Spring 2023**

Boyar, J. F. (Participant)  
21. Apr 2023

### **Digital Democracy Seminar**

Boyar, J. F. (Participant)  
21. Mar 2023 → 22. Mar 2023

### **ARCO Workshop Autumn 2022**

Boyar, J. F. (Participant)  
11. Nov 2022

### **Digital Democracy Seminar**

Boyar, J. F. (Participant)  
8. Nov 2022 → 9. Nov 2022



**DIREC Seminar 2022 - Digital Research Centre Denmark**

Boyar, J. F. (Participant)  
26. Sept 2022 → 27. Sept 2022

**18th Scandinavian Symposium and Workshops on Algorithm Theory**

Boyar, J. F. (Participant), Larsen, K. S. (Participant) & Favrholt, L. M. (Participant)  
27. Jun 2022 → 29. Jun 2022

**Workshop on Algorithms with Predictions**

Boyar, J. F. (Participant)  
1. May 2022 → 6. May 2022

**Digital Democracy Center Seminar**

Boyar, J. F. (Participant)  
5. Apr 2022 → 6. Apr 2022

**Digital Democracy Center Seminar**

Boyar, J. (Participant)  
16. Nov 2021 → 17. Nov 2021

**DIREC Seminar**

Boyar, J. (Participant)  
13. Sept 2021 → 14. Sept 2021

**Meeting with winners of SDU's prize for high school "researchers" in Strategic Development Goals**

Boyar, J. (Participant)  
24. Jun 2021

**Information Processing Letters (Journal)**

Boyar, J. (Member of editorial review board)  
2021 → 2024

**Online Algorithms with Advice and Related Models**

Boyar, J. (Program committee member)  
28. Aug 2020

**Priority algorithms — part 2: lower bounds**

Boyar, J. (Lecturer)  
28. Aug 2020

**Program committee member for 17th Scandinavian Symposium and Workshops on Algorithm Theory (Event)**

Boyar, J. (Peer reviewer)  
1. Feb 2020 → 19. Apr 2020

**Highlights of Algorithms**

Boyar, J. (Participant)  
14. Jun 2019 → 16. Jun 2019

**17th Workshop on Approximation and Online Algorithms (Event)**

Boyar, J. (Peer reviewer)  
16. May 2019 → 20. Jul 2019

**PIMS-UManitoba Distinguished Lecture**

Boyar, J. (Guest lecturer)  
18. Oct 2018

**Complexity classes for Online Algorithms via Advice Complexity**

Boyar, J. (Guest lecturer)  
16. Oct 2018

**University of Manitoba**

Boyar, J. (Visiting researcher)  
14. Oct 2018 → 21. Oct 2018

**Program committee member 45th International Conference on Current Trends in Theory and Practice of Computer Science (Event)**

Boyar, J. (Peer reviewer)  
7. Aug 2018 → 17. Oct 2018

**International Colloquium on Automata, Languages, and Programming (ICALP) 2018**

Boyar, J. (Participant)  
10. Jul 2018 → 13. Jul 2018

**The Scheduler is Very Powerful in Competitive Analysis of Distributed List Accessing**

Boyar, J. (Guest lecturer)  
9. Jul 2018

**Algorithm Theory, SWAT 2018, Malmö Sweden June 18-20, 2018**

Boyar, J. (Organizer)  
17. Jun 2018 → 20. Jun 2018

**ARCO Workshop Spring 2018**

Boyar, J. (Participant)  
6. Apr 2018

**Program committee member 16th Scandinavian Symposium and Workshops on Algorithm Theory (Event)**

Boyar, J. (Peer reviewer)  
12. Feb 2018 → 9. Apr 2018

**Complexity classes for online algorithms via advice complexity**

Boyar, J. (Guest lecturer)  
15. Sept 2017

**University of Toronto**

Boyar, J. (Visiting researcher)  
1. Sept 2017 → 20. Dec 2017

**15th International Algorithms and Data Structures Symposium 2017**

Boyar, J. (Organizer)  
30. Jul 2017 → 2. Aug 2017

**Boolean Functions and their Applications**

Boyar, J. (Organizer)  
7. Jul 2017

**Low-depth, low-size circuits for cryptographic applications**

Boyar, J. (Guest lecturer)

7. Jul 2017

**Fewer Multiplications in Cryptography**

Boyar, J. (Participant)  
30. Apr 2017

**National Institute for Standards and Technology**

Boyar, J. (Visiting researcher)  
19. Jan 2017 → 29. Jan 2017

**Program committee for Algorithms and Data Structures Symposium (WADS 2017) (External organisation)**

Boyar, J. (Member)  
10. Jan 2017 → 2. Aug 2017

**Computer Science Group for the national Bibliometric Research Indicator (External organisation)**

Boyar, J. (Member)  
1. Jan 2017 → 31. Dec 2019

**ARCO Workshop Autumn 2016**

Boyar, J. (Participant)  
25. Nov 2016

**Batch Coloring of Graphs**

Boyar, J. (Lecturer)  
25. Aug 2016

**Workshop on Approximation and Online Algorithms**

Boyar, J. (Participant)  
25. Aug 2016 → 26. Aug 2016

**European Symposium on Algorithms**

Boyar, J. (Participant)  
22. Aug 2016 → 24. Aug 2016

**ARCO workshop Spring 2016**

Boyar, J. (Chairman)  
4. Apr 2016

**Advice complexity for a class of online problems**

Boyar, J. (Lecturer)  
12. Nov 2015

**Constructive relationships between algebraic thickness and normality**

Boyar, J. (Lecturer)  
17. Aug 2015

**International Symposium on Fundamentals of Computation Theory**

Boyar, J. (Participant)  
16. Aug 2015 → 19. Aug 2015

**Online Algorithms with Advice / Relative Worst Order Analysis**

Boyar, J. (Lecturer)  
15. Jun 2015 → 19. Jun 2015

**ARCO Workshop Spring 2015**

Boyar, J. (Participant)  
29. May 2015

**International Symposium on Theoretical Aspects of Computer Science**

Boyar, J. (Participant)  
4. Mar 2015 → 7. Mar 2015

**National Institute for Standards and Technology**

Boyar, J. (Visiting researcher)  
22. Jan 2015 → 31. Jan 2015

**ARCO (Algorithmic Research: Cooperation around Oresound) (External organisation)**

Boyar, J. (Member)  
2015 → ...

**ARCO Workshhop Fall 2014**

Boyar, J. (Participant)  
14. Nov 2014

**Danmarks Tekniske Universitet (External organisation)**

Boyar, J. (Member)  
Oct 2014 → Nov 2014

**41st International Conference on Automata, Languages, and Programming**

Boyar, J. (Participant)  
7. Jul 2014 → 11. Jul 2014

**Trends in Online Algorithms**

Boyar, J. (Organizer)  
7. Jul 2014

**Skandinavian Symposium and Workshops on Algorithm Theory**

Boyar, J. (Participant)  
1. Jul 2014 → 4. Jul 2014

**Computability in Europe**

Boyar, J. (Organizer)  
24. Jun 2014 → 27. Jun 2014

**ARCO Workshop**

Boyar, J. (Participant)  
25. Apr 2014

**International Symposium on Theoretical Aspects of Computer Science**

Boyar, J. (Participant)  
6. Mar 2014 → 8. Mar 2014

**Aarhus Universitet (External organisation)**

Boyar, J. (Member)  
20. Dec 2013

**19th International Symposium on Fundamentals of Computation Theory**

Boyar, J. (Participant)

19. Aug 2013 → 21. Aug 2013

**Conference on Space Efficient Data Structures, Streams and Algorithms**

Boyar, J. (Participant)

15. Aug 2013 → 16. Aug 2013

**Algorithms & Data Structures Symposium**

Boyar, J. (Participant)

11. Aug 2013 → 14. Aug 2013

**CTIC Workshop on Algebraic Complexity Theory**

Boyar, J. (Participant)

18. Mar 2013

**40th International Colloquium on Automata, Languages, and Programming, ICALP 2013 (Event)**

Boyar, J. (Peer reviewer)

1. Mar 2013 → 31. Mar 2013

**Program committee for Latin American Theoretical INformatics (LATIN 2014) (External organisation)**

Boyar, J. (Member)

15. Feb 2013 → 29. Nov 2013

**National Institute for Standards and Technology**

Boyar, J. (Visiting researcher)

6. Jan 2013 → 18. Jan 2013

**Information Processing Letters (Journal)**

Boyar, J. (Peer reviewer)

2013 → ...

**Access Graphs Results for LRU versus FIFO under Relative Worst Order Analysis**

Boyar, J. (Lecturer)

14. Dec 2012

**eMR Sections (Journal)**

Boyar, J. (Peer reviewer)

10. Dec 2012

**A small depth-16 circuit for the AES S-box**

Boyar, J. (Lecturer)

3. Oct 2012

**Information Processing Letters (Journal)**

Boyar, J. (Peer reviewer)

1. Aug 2012 → 31. Aug 2012

**Journal of Systems and Software (Journal)**

Boyar, J. (Peer reviewer)

1. Aug 2012 → 31. Aug 2012

**University of Waterloo**

Boyar, J. (Visiting researcher)

1. Aug 2012 → 20. Dec 2012

**13th Scandinavian Symposium and Workshops on Algorithm Theory**

Boyar, J. (Participant)

4. Jul 2012 → 6. Jul 2012

**International Workshop on Digital Forensic & Incident Analysis**

Boyar, J. (Participant)

6. Jun 2012 → 8. Jun 2012

**A small depth-16 circuit for the AES S-Box**

Boyar, J. (Lecturer)

5. Jun 2012

**IFIP TC 11 International Information Security and Privacy Conference**

Boyar, J. (Participant)

4. Jun 2012 → 6. Jun 2012

**Greenlight for Girls (External organisation)**

Boyar, J. (Member)

21. Apr 2012

**Algorithmica (Journal)**

Boyar, J. (Peer reviewer)

1. Feb 2012 → 28. Feb 2012

**Institute for Standards and Technology**

Boyar, J. (Visiting researcher)

5. Jan 2012 → 13. Jan 2012

**RSA and primality testing**

Boyar, J. (Guest lecturer)

28. Nov 2011

**eMR Sections (Journal)**

Boyar, J. (Peer reviewer)

1. Oct 2011 → 31. Oct 2011

**Seminar om Informationsteknologi**

Boyar, J. (Participant)

5. May 2011

**National Institute of Standards and Technology**

Boyar, J. (Visiting researcher)

13. Jan 2011 → 25. Jan 2011

**RSA and Primality Testing**

Boyar, J. (Guest lecturer)

30. Nov 2010

**9th International Symposium on Experimental Algorithms, SEA 2010**

Boyar, J. (Participant)

19. May 2010 → 22. May 2010

**Quality Measures for On-Line Algorithms**

Boyar, J. (Lecturer)  
18. May 2010

**eMR Sections (Journal)**

Boyar, J. (Peer reviewer)  
1. Jan 2010

**Theory of Computing (Journal)**

Boyar, J. (Editor)  
1. Jan 2010

**Five analysis techniques for on-line algorithms**

Boyar, J. (Lecturer)  
21. Apr 2009

**Dagstuhl Seminar : Adaptive, Output Sensitive, Online and parameterized Algorithms**

Boyar, J. (Participant)  
19. Apr 2009 → 24. Apr 2009

**Lecture for Georg Mohr Contest Winners' Seminar**

Boyar, J. (Lecturer)  
2. Mar 2009

**National Institute for Standards and Technology**

Boyar, J. (Visiting researcher)  
8. Jan 2009 → 16. Jan 2009

**9th Latin American Theoretical Informatics Symposium (LATIN 2010) (Event)**

Boyar, J. (Editor)  
1. Jan 2009

**eMR Sections (Journal)**

Boyar, J. (Editor)  
1. Jan 2009

**Primality testing**

Boyar, J. (Lecturer)  
25. Sept 2008

**On the Shortest Linear Straight-Line Program for Computing Linear Forms**

Boyar, J. (Lecturer)  
27. Aug 2008

**Draw the Line! : Cultural boundary - making the everyday academic work life**

Boyar, J. (Participant)  
30. May 2008 → 31. May 2008

**34th International Colloquium on Automata, Languages and Programming (Event)**

Boyar, J. (Editor)  
1. Jan 2008

**Mathematical Reviews (Journal)**

Boyar, J. (Editor)  
1. Jan 2008

**National Institute for Standards and Technology**

Boyar, J. (Visiting researcher)

3. Dec 2007 → 8. Dec 2007

**Speaker**

Boyar, J. (Lecturer)

9. Nov 2007

**University of Toronto**

Boyar, J. (Visiting researcher)

6. Nov 2007 → 12. Nov 2007

**ALGO 2007 : ESA 2007WAOA 2007**

Boyar, J. (Participant)

7. Oct 2007 → 13. Oct 2007

**CRYPTO 2007**

Boyar, J. (Participant)

20. Aug 2007 → 23. Aug 2007

**University of California**

Boyar, J. (Visiting researcher)

1. Jul 2007 → 20. Dec 2007

**Censorkorpset for datalogi (External organisation)**

Boyar, J. (Member)

1. Apr 1994 → ...