# Sebastian Berndt

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**Research Areas:** steganography, cryptography, approximation algorithms, FPT algorithms
**Publications:** APPROX, IH&MMSEC, ISAAC, LATA (Link)
**Teaching:** Algorithm Design, IT-Security, Coding Theory (Link)
**Education:** B. Sc., M. Sc., Ph. D. Student (Link)

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## Education

2010   BSc in Computer Science, University of Kiel
2012   MSc in Computer Science, University of Kiel
2012–  Research Associate, Ph. D. Student, University of Lübeck

## Publications & talks

2015   Berndt, Sebastian and Jansen, Klaus and Klein, Kim-Manuel (2015),
       "Fully Dynamic Bin Packing Revisited", *APPROX/RANDOM 2015*

2015   Berndt, Sebastian,
       "Fully Dynamic Bin Packing Revisited", Approximation Algorithms and Parameterized Complexity

2016   Berndt, Sebastian and Reischuk, Rüdiger (2016),
       "Steganography Based on Pattern Languages", *LATA 2016*

2016   Berndt, Sebastian and Liśkiewicz, Maciej (2016),
       "Provable Secure Universal Steganography of Optimal Rate", *ACM IH&MMSEC 2016*,
       **Awarded Best Student Paper.**

2016   Berndt, Sebastian and Liśkiewicz, Maciej (2016),
       "Hard Communication Channels for Steganography", *ISAAC 2016*

## Teaching

2012   Exercises on "Algorithm Design"
2012   Exercises on "Introduction to IT Security and Reliability"
2013   Exercises on "Coding and Security"
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2014   Exercises on "Introduction to IT Security and Reliability"
2015   Exercises on "Coding and Security"
2015   Exercises on "Algorithm Design"
2015   Exercises on "Introduction to IT Security and Reliability"
2015   Lectures on "Presentation and Documentation"
2016   Exercises on "Coding and Security"

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## Extracurricular Activities

2012–   Received the *"Teaching Certificate I"* by taking more than 10 courses in e.g. team leading, presentation techniques and others (Link)

2016   Organizing Commitee of *Creative Mathematical Sciences Communication* (Link)

2016   Taught a week-long summer course on algorithms to a group of pupils from age 14 to 17 based on *Computer Science Unplugged* (Link)

2016   Developed the tool *Jdrasil* to compute tree decompisitions which got the third place in the tracks »parallel exact solver« and »parallel heuristic solver« in the first *PACE* challenge on parameterized algorithms (Software,Challenge)

## Awards

2016   Best Student Paper Award for "Provable Secure Universal Steganography of Optimal Rate"

2016   Third place in the tracks »parallel exact solver« and »parallel heuristic solver« in the first *PACE* challenge on parameterized algorithms

## Interests

Kayaking, Improvisational Theatre, Hiking

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