

Jan Butora

38 Rue de la Halle
59800, Lille
France
Tel: +33 6 62 53 40 02
Email: jbutora1@gmail.com

Research activity

Centre national de la recherche scientifique (CNRS), Lille, France

Postdoctoral researcher June 2021 -

Binghamton University, Binghamton, NY

Research assistant August 2017 - May 2021

Education

Binghamton University, Binghamton, NY

Ph.D. Electrical and Computer Engineering, May 2021.

Charles University, Prague, Czech Republic

M.S. Mathematical Methods of Information Security, June 2017 (with honors).

B.S. Mathematical Methods of Information Security, June 2015.

Research Interests

- Steganography
- Steganalysis
- Applied Deep Learning

Teaching Experience

Binghamton University

Instructor

- EECE-580G Deep Learning for EECE, Fall 2020

Instructor of Record

- EECE-566 Detection Theory, Spring 2019
- EECE-562 Fundamentals of Steganography, Fall 2019

Awards

- Best Paper Award, 9th IH&MMSec. Workshop, Brussels, Belgium, June 22-25, 2021
 - Revisiting Perturbed Quantization
- Best Paper Award, 7th IH&MMSec. Workshop, Paris, France, July 3-5, 2019
 - Effect of JPEG Quality on Steganographic Security
- Research Assistantship (RA), EECE Department, Binghamton University, 2017-2021

Publications

Journal Papers:

2019

- **Reverse JPEG Compatibility Attack**, with J. Fridrich, IEEE Transactions on Information Forensics and Security, vol. 15, no.1, pp. 1444-1454, December 2019

Conference Papers:

2021

- **Revisiting Perturbed Quantization**, with J. Fridrich, 9th IH&MMSec. Workshop, Brussels, Belgium, June 22-25, 2021.
- **How to Pretrain for Steganalysis**, with Y. Yousfi and J. Fridrich, 9th IH&MMSec. Workshop, Brussels, Belgium, June 22-25, 2021.
- **Improving EfficientNet for JPEG Steganalysis**, with Y. Yousfi, J. Fridrich, and C. F. Tsang, 9th IH&MMSec. Workshop, Brussels, Belgium, June 22-25, 2021.
- **Extending the Reverse JPEG Compatibility Attack to Double Compressed Images**, with J. Fridrich, IEEE ICASSP 2021, Toronto, Canada, June 6-11, 2021.

2020

- **ImageNet Pre-trained CNN Models for JPEG Steganalysis**, with Y. Yousfi, E. Khvedchenya, and J. Fridrich, IEEE WIFS, New York, NY, December 6-11, 2020
- **Turning Cost-Based Steganography into Model-Based**, with Y. Yousfi and J. Fridrich, 8th IH&MMSec. Workshop, Denver, CO, June 20-22, 2020

- **Steganography and its Detection in JPEG Images Obtained with the "Trunc" Quantizer**, with J. Fridrich, IEEE ICASSP 2020, Barcelona, Spain, May 4-8, 2020
- **Minimum Perturbation Cost Modulation for Side-Informed Steganography**, with J. Fridrich, Proc. IS&T, Electronic Imaging, Media Watermarking, Security, and Forensics 2020, San Francisco, CA, January 26-30, 2020

2019

- **Effect of JPEG Quality on Steganographic Security**, with J. Fridrich, 7th IH&MMSec. Workshop, Paris, France, July 3-5, 2019
- **Breaking ALASKA: Color Separation for Steganalysis in JPEG Domain**, with Y. Yousfi, J. Fridrich, and Q. Giboulot, 7th IH&MMSec. Workshop, Paris, France, July 3-5, 2019
- **Detection of Diversified Stego Sources with CNNs**, with J. Fridrich, Proc. IS&T, Electronic Imaging, Media Watermarking, Security, and Forensics 2019, San Francisco, CA, January 14-17, 2019