

## Jan Butora

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BIRTH DATE AND BIRTH PLACE:	1993, May 7th, Havirov, Czech Republic	
NATIONALITY:	Czech	
POSITION:	<b>CNRS</b> (French National Center of Scientific Research) <b>Postdoctoral Researcher</b>	
RESEARCH DOMAINS:	Media Forensics, Steganography, Steganalysis, Trustworthy Deep Learning, Generated Content Detection, Watermarking, Statistical Image Modeling	
EDUCATION:	<b>Binghamton University</b> , Binghamton, NY, USA 2021: PhD under the supervision of Jessica Fridrich: Digital Image Steganography  <b>Charles University</b> , Prague, Czech Republic 2017: Master thesis with speciality: Mathematical Methods of Information Security ( <i>summa cum laude</i> ) 2015: Bachelor thesis with speciality: Mathematical Methods of Information Security	
EMPLOYEES:	<b>Centre National de la Recherche Scientifique</b> , France <i>CNRS Postdoctoral Researcher at CRIStAL (Lille),</i> <i>Funded by l'Agence de l'innovation de défense</i>	<b>Jun. 2021 - Today</b>
	<b>Binghamton Technology</b> , Binghamton, NY, USA <i>PhD under J. Fridrich's supervision</i> <i>Funded by DARPA</i>	<b>Aug. 2017 - May 2021</b>
AWARDS:	<b>Best Paper Award</b> , 9th Workshop on Information Hiding and Multimedia Security, Brussels, Belgium, June 22-25, 2021 "Revisiting Perturbed Quantization" co-authored with Jessica Fridrich  <b>Best Paper Award</b> , 7th Workshop on Information Hiding and Multimedia Security, Paris, France, July 3-5, 2019 "Effect of JPEG Quality on Steganographic Security" co-authored with Jessica Fridrich	
COMMUNITY INVOLVEMENT:	2022 - 2024: <b>Elected Member</b> of IEEE Information Forensics and Security Technical Committee  2022 - 2024: <b>Award Subcommittee Member</b> of IEEE Information Forensics and Security Technical Committee  Dec. 2022: <b>Award Chair</b> of the IEEE International Workshop on Information Forensics and Security, Shanghai, China  Jun. 2022: <b>Technical Program Chair</b> of the ACM Workshop on Information Hiding and Multimedia Security, Santa Barbara, USA	

REVIEWER:	<ul style="list-style-type: none"> <li>• IEEE Transactions on Information Forensics and Security (IEEE TIFS)</li> <li>• IEEE Transactions on Dependable and Secure Computing (IEEE TDSC)</li> <li>• IEEE Transactions on Multimedia (IEEE TM)</li> <li>• IEEE International Conference on Acoustics, Speech and Signal Processing (IEEE ICASSP)</li> <li>• IEEE International Conference in Image Processing (IEEE ICIP)</li> <li>• IEEE International Workshop on Information Forensics and Security (IEEE WIFS)</li> <li>• ACM Workshop on Information Hiding and Multimedia Security (ACM IH&amp;MMSec)</li> </ul>
INVITED TALKS:	<p><b>Controlling False Positives of DL steganalyzers</b>, seminar in LIRMM laboratory, Montpellier, France, December 2023</p> <p><b>Robust Steganography</b>, UNCOVER Summer School on Steganography, Prague, Czech Republic, September 2023</p>
TEACHING:	<p><b>IMT Nord Europe</b>, France</p> <p>2024: Security, Authentication, and Forensics  2023: Security, Authentication, and Forensics  2022: Théorie du Signal</p> <p><b>Binghamton University</b>, USA</p> <p>2020: Deep Learning for Electrical and Computer Engineering  2019: Detection Theory  2019: Fundamentals of Steganography</p>
SCIENTIFIC PUBLICATIONS:	<p>4 articles published in scientific journals + 1 currently under review</p> <p>20 papers published in conferences + 2 currently under review</p>
CITATIONS (SCHOLAR):	<p>h-index: 9</p> <p>Number of citations: 352</p>
LIST OF PUBLICATIONS:	<p><b>International journal publications</b></p> <ul style="list-style-type: none"> <li>• ‘Finding Incompatibles Blocks for Reliable JPEG Steganalysis’ with E. Levecque, and P. Bas, IEEE Transactions on Information Forensics and Security, under review</li> <li>• ‘Size-Independent Reliable CNN for RJCA Steganalysis’ with P. Bas, IEEE Transactions on Information Forensics and Security, March 2024</li> <li>• ‘Errorless Robust JPEG Steganography using Outputs of JPEG Coders’ with P. Puteaux, and P. Bas, IEEE Transactions on Dependable and Secure Computing, August 2023</li> <li>• ‘Side-Informed Steganography for JPEG Images by Modeling Decompressed Images’ with P. Bas, IEEE Transactions on Information Forensics and Security, April 2023</li> <li>• ‘Reverse JPEG Compatibility Attack’ with J. Fridrich, IEEE Transactions on Information Forensics and Security, vol. 15, no.1, pp. 1444-1454, December 2019</li> </ul>

### International conference publications

- ‘Detection of the Adobe Pattern’, with P. Bas, 32th EUSIPCO, Lyon, France, August 26-30, 2024, under review
- ‘The Adobe Hidden Feature and its Impact on Sensor Attribution’, with P. Bas, 12th IH&MMSec. Workshop, Baiona, Spain, June 24-26, 2024, under review
- ‘Analysis and Mitigation of the False Alarms of the Reverse JPEG Compatibility Attack’, with P. Bas, 11th IH&MMSec. Workshop, Chicago, Illinois, June 28-30, 2023
- ‘Compatibility and Timing Attacks for JPEG Steganalysis’, with E. Levecque, and P. Bas, 11th IH&MMSec. Workshop, Chicago, Illinois, June 28-30, 2023
- ‘Toward Reliable JPEG Steganalysis (at QF 100)’, with E. Levecque, J. Klein, and P. Bas, IEEE WIFS, Shanghai, China, December 12-16, 2022
- ‘Fighting the Reverse JPEG Compatibility Attack: Pick your Side’, with P. Bas, 10th IH&MMSec. Workshop, Santa Barbara, California, June 27-29, 2022
- ‘CNN Steganalyzers Leverage Local Embedding Artifacts’, with Y. Yousfi, and J. Fridrich, IEEE WIFS, Montpellier, France, December 7-10 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
- ‘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
- ‘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

### National conference publications

- ‘Attaque temporelle de la compatibilité JPEG’, with E. Levecque, and P. Bas, GRETSI, Grenoble, France, August 28 - September 1, 2023
- ‘Stéganographie robuste et sans erreur dans des images JPEG en utilisant les sorties des codeurs JPEG’, with P. Puteaux, and P. Bas, CORESA, Lille, France, 7-9 June , 2023
- ‘Vers une Stéganalyse Certifiée pour des Images JPEG’, with E. Levecque, J. Klein, and P. Bas, GRETSI, Nancy, France, September 6-9, 2022
- ‘High Quality JPEG Compressor Detection via Decompression Error’, with P. Bas, GRETSI, Nancy, France, September 6-9, 2022