

17th Canadian Workshop on Information Theory

CWIT 2021 | Ottawa, Ontario, Canada | June 2-5, 2021

Welcome

CFP / Submit

Plenaries / Keynote

About the host



Welcome



The Canadian Workshop on Information Theory (CWIT) is a prestigious international conference on communications, information theory, and signal processing. The 17th CWIT conference will be held on the campus of **University of Ottawa**, Ontario, from June 2 to June 5, 2021.

[Submit your paper now →](#)

Important Dates

Full-length paper submission: **April 5, 2022**

Notification of acceptance: **April 22, 2022**

Final manuscript submission / Author registration: **May 6, 2022**

17th Canadian Workshop on Information Theory

CWIT 2021 | Ottawa, Ontario, Canada | June 2-5, 2021

Welcome

CFP / Submit

Plenaries / Keynote

About the host



Call for papers

Full-length paper submission deadline extended to April 12, 2021

[Download PDF version of the Call for Papers](#)

Submit your paper now →

The Canadian Workshop on Information Theory (CWIT) will be held on the campus of University of Ottawa, Ontario, from Sunday, June 2 to Wednesday, June 5, 2022. Papers in (but not exclusive to) the following fields of research are solicited:

- Shannon Theory
- Big Data Analytics
- Multiuser Information Theory
- Quantum Information Processing
- Coding Theory and Practice
- Coded Modulation
- Data Compression and Source Coding
- Optical Communications
- Cooperative Communication
- Low-latency Communication
- Information Theory in Biology
- Cryptology and Data Security
- Information Theory and Statistics
- Signal Processing
- Pattern Recognition and Learning
- Sequences and Complexity
- Multi-terminal Information Theory
- Data Networks
- Detection and Estimation
- Cognitive Radio
- Underwater Communications
- Network Coding and Applications

Authors wishing to have papers considered for the workshop should electronically submit their full papers (maximum six pages) in PDF format through EDAS (<https://edas.info/index.php>) using the standard IEEE two- column format (<https://www.ieee.org/conferences/publishing/templates.html>). Accepted papers will be published on IEEE Xplore (pending technical co- sponsorship of the IEEE Information Theory Society).

Important Deadlines:

Full-length paper submission: **April 12, 2021**

Notification of acceptance: **April 22, 2021**

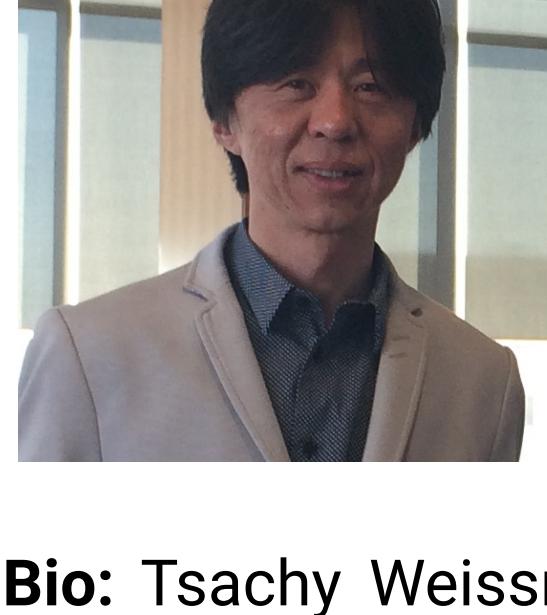
Final manuscript submission / Author registration: **May 6, 2021**



Plenaries / Keynotes

MONDAY, JUNE 3 – 9:00 AM

Yongyi Mao, University of Ottawa



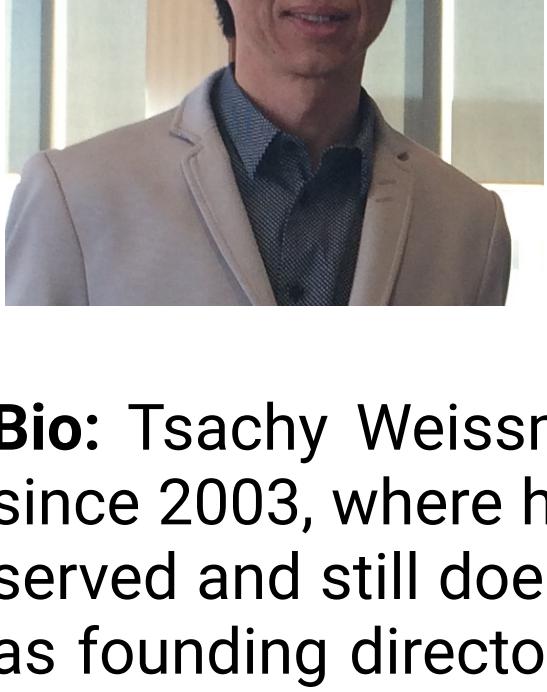
Title: What machines can learn from humans about compression

Abstract: Inspired by Shannon's work on estimating the entropy of a language, we experimented with a framework for image compression comprising one human describing images using text instructions to another, who is tasked with reconstructing the original image. These image reconstructions were then rated by human scorers on the Amazon Mechanical Turk platform and compared to reconstructions obtained by existing image compressors.

Bio: Tsachy Weissman has been on the faculty of the Electrical Engineering department at Stanford since 2003, where he enjoys activities such as research and teaching the science of information. He has served and still does on editorial boards for scientific journals, technical advisory boards in industry, and as founding director of the Stanford Compression Forum. His favorite gig to date was being an advisor to the HBO show "Silicon Valley" until he was terminated when it was realized his students are more creative and reliable consultants. He hates writing about himself in the third person.

MONDAY, JUNE 3 – 9:00 AM

Yongyi Mao, University of Ottawa



Title: What machines can learn from humans about compression

Abstract: Inspired by Shannon's work on estimating the entropy of a language, we experimented with a framework for image compression comprising one human describing images using text instructions to another, who is tasked with reconstructing the original image. These image reconstructions were then rated by human scorers on the Amazon Mechanical Turk platform and compared to reconstructions obtained by existing image compressors.

Bio: Tsachy Weissman has been on the faculty of the Electrical Engineering department at Stanford since 2003, where he enjoys activities such as research and teaching the science of information. He has served and still does on editorial boards for scientific journals, technical advisory boards in industry, and as founding director of the Stanford Compression Forum. His favorite gig to date was being an advisor to the HBO show "Silicon Valley" until he was terminated when it was realized his students are more creative and reliable consultants. He hates writing about himself in the third person.

MONDAY, JUNE 3 – 9:00 AM

Yongyi Mao, University of Ottawa



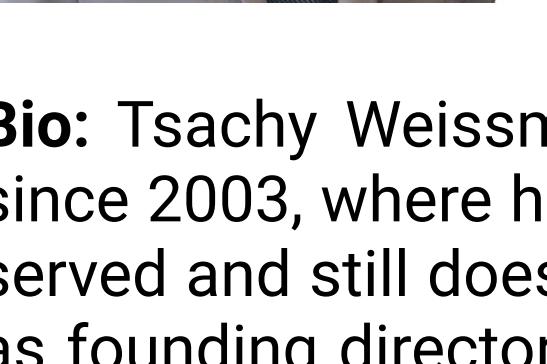
Title: What machines can learn from humans about compression

Abstract: Inspired by Shannon's work on estimating the entropy of a language, we experimented with a framework for image compression comprising one human describing images using text instructions to another, who is tasked with reconstructing the original image. These image reconstructions were then rated by human scorers on the Amazon Mechanical Turk platform and compared to reconstructions obtained by existing image compressors.

Bio: Tsachy Weissman has been on the faculty of the Electrical Engineering department at Stanford since 2003, where he enjoys activities such as research and teaching the science of information. He has served and still does on editorial boards for scientific journals, technical advisory boards in industry, and as founding director of the Stanford Compression Forum. His favorite gig to date was being an advisor to the HBO show "Silicon Valley" until he was terminated when it was realized his students are more creative and reliable consultants. He hates writing about himself in the third person.

MONDAY, JUNE 3 – 9:00 AM

Yongyi Mao, University of Ottawa



Title: What machines can learn from humans about compression

Abstract: Inspired by Shannon's work on estimating the entropy of a language, we experimented with a framework for image compression comprising one human describing images using text instructions to another, who is tasked with reconstructing the original image. These image reconstructions were then rated by human scorers on the Amazon Mechanical Turk platform and compared to reconstructions obtained by existing image compressors.

Bio: Tsachy Weissman has been on the faculty of the Electrical Engineering department at Stanford since 2003, where he enjoys activities such as research and teaching the science of information. He has served and still does on editorial boards for scientific journals, technical advisory boards in industry, and as founding director of the Stanford Compression Forum. His favorite gig to date was being an advisor to the HBO show "Silicon Valley" until he was terminated when it was realized his students are more creative and reliable consultants. He hates writing about himself in the third person.

17th Canadian Workshop on Information Theory

CWIT 2021 | Ottawa, Ontario, Canada | June 2-5, 2021

Welcome

CFP / Submit

Plenaries / Keynote

About the host



About the Host

University of Ottawa's Faculty of Engineering

Ranked among the top engineering schools in Canada and worldwide, the Faculty of Engineering plays a key role in helping University of Ottawa earn its well-deserved reputation as one of Canada's most innovative universities in learning and research.

University of Ottawa's Engineering has a reputation for innovative programs, cutting-edge research, leading faculty, and aspiring students. It has earned a strong reputation as a centre for academic excellence and innovation. The Faculty has approximately **180 faculty members, along with close to 5,000 undergraduate and about 900 graduate students.**



An integral part of our innovative culture is the focus on experiential learning and problem based learning that enables students to gain hands-on experience through co-op work terms, internships, research opportunities, clubs and teams and teamwork-based assignments. This stimulates learning, leads to personal development and discovery, and enhances students' ability to function effectively very quickly after moving into their career paths.

The Faculty attracts approximately \$45 million in annual research funding. Engineering faculty, staff and students at University of Ottawa pursue research and learning in more than **22 research centres, institutes and networks** whose interdisciplinary pursuits cross departmental and Faculty boundaries.

Outside the University, we collaborate regularly on research projects with partners in universities, government and **more than 100 companies in Canada and abroad**. Our partnerships with global engineering companies are key to the success of our learning and discovery programs.

Our mission is purposeful and clear: To think globally and act locally to solve the grand challenges facing our communities. At University of Ottawa, we believe in excellence and innovation and inspiring engaged citizen scholars who will transform the world.

Connect With Us

