



# **2011 IEEE Intl. Workshop on Information Forensics and Security**

Foz do Iguaçu, Brazil, November 29th – December 2nd, 2011

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## **General Chairs**

**Anderson Rocha**  
University of Campinas, Brazil

**Dinei Florencio**  
Microsoft Research, USA

**Nasir Memon**  
NYU-Poly, USA

## **Program Chairs**

**C.-C. Jay Kuo**  
USC, USA

**Wade Trappe**  
Rutgers, USA



An aerial photograph of a massive waterfall, likely Victoria Falls, surrounded by dense green forest. A vibrant rainbow is visible in the mist rising from the falls. The word "Opening" is superimposed in large, bold, black letters across the center of the image. A wooden walkway is visible on the left side of the falls, and a small boat can be seen in the pool of water at the base of the falls on the right.

**Opening**





# General Information

- ▶ It is an exciting time to be involved in research in **information forensics and security**
- ▶ Technology is rapidly advancing to meet the computational and communication requirements needed to solve challenges that were previously in the science fiction realm



# General Information

- ▶ The **IEEE Intl. Workshop on Information Forensics and Security (WIFS)** has been a premier venue for researchers in information forensics and security to present the latest research results in the field
- ▶ It has also served to foster international collaboration to address the security threats facing our society

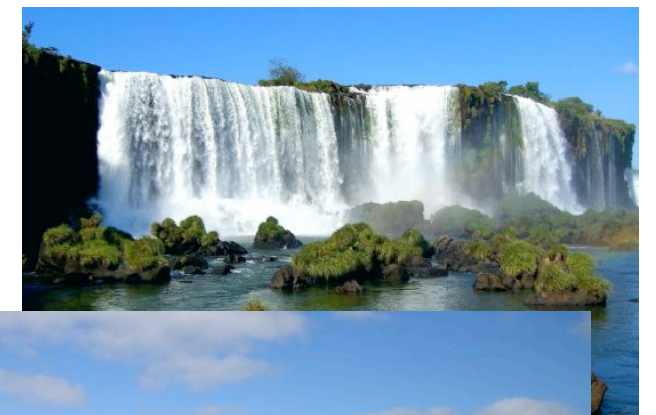


# General Information

- ▶ The 2011 IEEE International Workshop on Information Forensics and Security is being held at **Foz do Iguaçu, Brazil**

# Foz do Iguaçu, Brazil

- ▶ Recently chosen one of the new World's 7 Wonders
- ▶ Second destination most visited in Brazil
- ▶ Amazing places to visit





An aerial photograph of a massive waterfall, likely Victoria Falls, surrounded by dense green forest. A vibrant rainbow is visible in the mist rising from the falls. The text "Strong Collaborations" is overlaid in the center in a bold, black, sans-serif font.

# **Strong Collaborations**



A background image of a waterfall cascading over rocks, with water mist rising from the base.

# Collaboration – Federal Police and its Forensic Experts Association

- ▶ This year, we are fortunate to have **close partners** for the organization of this workshop
- ▶ Among these partners are
  - Brazilian Association of Federal Police Forensic Experts
  - Brazilian Federal Police (DPF)



A scenic background image of a waterfall cascading over rocks, with mist rising from the base. The image is slightly blurred and has a soft, ethereal quality.

# **Collaboration – Federal Police and its Forensic Experts Association**

- ▶ DPF counts on 1,000+ forensic experts nowadays
- ▶ 25% have Masters/PhDs
- ▶ Several knowledge areas (CS, EE, Chemistry, Bio, etc.)

A background image of a waterfall cascading over rocks, with water spray visible at the base.

# Collaboration – Federal Police and its Forensic Experts Association

- ▶ How this partnership started?
- ▶ Back in 2009, DPF idealized an event to bring together researchers, experts, and practitioners in face of the upcoming events in **2014 World Cup** and **2016 Summer Olympics**
- ▶ This event, called ICMedia will be held in 2012



A background image of a waterfall cascading over rocks, with water mist rising from the base.

# Collaboration – Federal Police and its Forensic Experts Association

- ▶ As a first step for this event, the DPF joined us in a bid to bring to Brazil an important forensics meeting, WIFS
- ▶ In this partnership, we created the **ICMedia Cases & Open Issues** as a means to trigger important collaborations between WIFS researchers and DPF experts

A background image of a waterfall cascading over rocks, with water spray visible at the base.

# Collaboration – Federal Police and its Forensic Experts Association

- ▶ Two tracks of 2011 WIFS will be dedicated to presentations from the forensic expert community in DPF
  - **ICMedia Cases**
  - **ICMedia Open Issues**
- ▶ These presentations will cover some case studies and technical open issues which are perceived as specially relevant for the solution of real life cases



A background image of a waterfall cascading over rocks, with water spray visible at the base.

# Collaboration – Federal Police and its Forensic Experts Association

- ▶ These complementary events will be a **great opportunity** for both experts and researchers to exchange experience and make professional contacts
- ▶ We expect the association between the IFS-TC community and forensic experts working directly in the prevention and solution of crimes will lead to **greater visibility and application of state-of-the-art research results**



An aerial photograph of a massive waterfall, likely Victoria Falls, cascading over a wide, dark rock face. The water is white and turbulent as it falls, creating a thick mist that rises into the air. A vibrant rainbow is visible in the mist, arching over the falls. The surrounding landscape is lush with green vegetation, including dense forests and smaller waterfalls. A wooden walkway or bridge is visible on the left side of the falls, and a small boat can be seen in the pool of water at the base of the falls. The text "The Program" is overlaid in the center of the image.

# The Program





# The Program

- ▶ This year we received an overwhelming submission number of 123 manuscripts
- ▶ 40 high-quality papers were selected after rigorous peer reviews

A scenic image of a waterfall cascading over rocks, surrounded by lush greenery, serving as a background for the top portion of the slide.

# The Program

- ▶ Papers can be categorized in:
  - biometrics
  - computer and network security/forensics
  - multimedia security/forensics
  - signal processing for forensics, and
  - theoretical foundations for forensics





# The Program

- ▶ We have split the workshop into several tracks consisting of papers from these core areas
- ▶ We also have included a poster session on Thursday, in which we, for the first time in WIFS, are encouraging researchers to share their work-in-progress
- ▶ This session will also have cases and demos presented by DPF Experts



An aerial photograph of a massive waterfall, likely Victoria Falls, surrounded by dense green forest. A vibrant rainbow is visible in the mist rising from the falls. The word "Keynotes" is overlaid in a large, bold, black font across the center of the image.

# Keynotes





# Keynotes

- ▶ Patrick Flynn (Univ. Notre Dame)
  - Talk: *Iris Recognition: Challenges, Advances, and Generalizations*
- ▶ William Horne (HP Labs.)
  - Talk: *Cloud Security: What's New?*
- ▶ Ton Kalker (Huawei Technologies)
  - Talk: *Watermarking: Quo Vadis?*



An aerial photograph of a massive waterfall, likely Victoria Falls, cascading over a wide, rocky ledge. The water is a vibrant white, creating a thick mist that rises from the base. A brilliant rainbow is visible in the mist, arching across the center of the frame. The surrounding landscape is a lush, green forest. In the upper right, a long bridge spans a section of the river. In the lower left, a wooden walkway with railings leads down towards the water's edge. The word "Housekeeping" is superimposed in a large, bold, black font across the middle of the image.

# Housekeeping



A scenic background image of a waterfall cascading over rocks, with a rainbow visible in the misty spray. The image is oriented horizontally but appears to be a vertical shot rotated 90 degrees clockwise.

# Housekeeping

- ▶ Lunch all days
- ▶ IFS-TC Meeting tonight
- ▶ Welcome reception right after
- ▶ Dinner on Thursday
- ▶ WIFS'12



An aerial photograph of Victoria Falls, showing multiple cascades of water falling over a rocky cliff into a pool below. A vibrant rainbow is visible in the mist rising from the falls. The surrounding area is lush with green forest, and a wooden walkway is visible on the left side of the falls. The text "A Word of Thanks" is overlaid in the center in a bold, black, sans-serif font.

**A Word of  
Thanks**



A scenic photograph of a waterfall cascading over rocks, with lush green foliage surrounding it. The water is white and frothy as it falls.

# A Word of Thanks

- ▶ In closing, we thank all of the authors who submitted their manuscripts to the workshop and the reviewers who provided valuable reviews in a timely manner
- ▶ We also thank APCF and DPF people as well as everyone in IFS-TC and outside the TC for their professional assistance in organizing the conference
- ▶ Without the help of all of these people this event would not be possible



An aerial photograph of a massive waterfall, likely Victoria Falls, cascading over a wide, rocky ledge. The water is white and turbulent as it falls into a pool below. A vibrant rainbow is visible in the mist rising from the base of the falls. The surrounding landscape is lush with green vegetation and dense forest. A wooden walkway or bridge is visible on the left side of the falls, and another bridge spans the river in the background. The word "Closing" is overlaid in a large, bold, black font in the center of the image.

**Closing**



A scenic image of a waterfall cascading over rocks, with mist rising from the base, serving as a background for the slide.

# Closing

- ▶ Although much has been accomplished in the last few years in the area of information forensics and security, we hope that this workshop will serve to
  - further spur future research, and
  - help ensuring that this nascent field will continue to flourish both in theory and practice



An aerial photograph of a massive waterfall, likely Iguazu Falls, cascading over a rocky cliff. A vibrant rainbow is visible in the mist rising from the base of the falls. The surrounding landscape is lush green with dense tropical forest. A bridge is visible in the upper right, crossing a river that feeds into the falls.

# **Welcome to Brazil**

**2011 International Workshop on Information Forensics and Security (WIFS) Chairs**

Anderson Rocha (Unicamp, Brazil)

C.-C. Jay Kuo (USC, USA)

Dinei Florencio (Microsoft Research, USA)

Nasir Memon (NYU-Poly, USA)

Wade Trappe (Rutgers, USA)





# Sponsors and Partners

