



# Tom Coughlin

Petition for IEEE President Elect in 2021

## Who I am

I am originally from South Dakota and raised in the upper Midwest

I have a BS Physics and an MS and PhD in Electrical Engineering

I have an extended and diverse family in California

I am a consultant in digital storage and memory and also write and speak regularly on storage, memory and their applications





Flash Memory is No Longer an Understudy in Media and Entertainment

Applications for Flash Memory in M&E



Tom Coughlin  
Coughlin Associates

## Who I am (2)

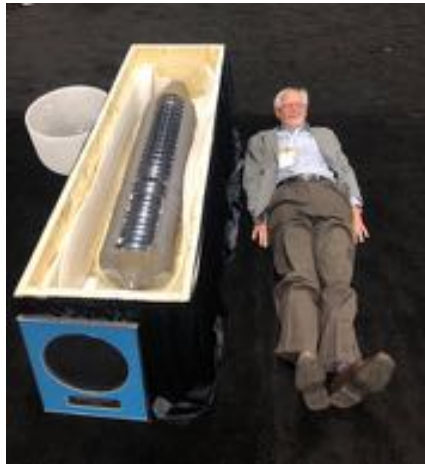
Besides IEEE, I have been active in other professional organizations including IDEMA, SNIA and SMPTE

I have been an IEEE member for 42 years, am an IEEE Fellow and also a member of HKN

Winner of 2020 MGA Leadership Award



Intel Sells Its NAND Flash Business To SK Hynix



Coughlin Associates

Memories of Tomorrow

Tom Coughlin, Coughlin Associates

&

Jim Handy, Objective Analysis



## IEEE activities

I am past president of IEEE-USA,  
former director of IEEE Region 6,  
chair of the IEEE NIC,  
past chair of the IEEE Public Visibility  
Committee,  
general chair, 2011 Sections Congress,  
past VP for the CT Society and helped  
with IEEE standards,  
past chair of the Santa Clara Valley  
IEEE section (the largest section in the  
world) and  
an active IEEE volunteer, working in  
many IEEE organization units.



ISSUE 50

### Flying Animals and the Art of Presentation

Column: The Art of Storage

### Let's Build a Holodeck!

IEEE USA InSight Fall Online Training 5

CAREERS POLICY SERVICES NEWS SUBSCRIBE JOIN US MEDIA/ADS

### Greek Chapter Starts its Life Cycle with Distinguished Lecturer Talk



The IEEE Greek Chapter members with distinguished lecturer, Dr. Thomas M. Coughlin, at the start of the chapter's life cycle.



### Digital Storage and Memory Technology (Part 1)

Tom Coughlin, Roger Hoot, and Chris Panda November 2017

### A Cross-Standard Metadata Formatting Structure

Scott L. Lasker, Senior Member, IEEE, Thomas Coughlin, Senior Member, IEEE

**Abstract**—Over the past 10 years, the amount of un-generated content has increased at phenomenal rates. However, due to a lack of uniform content descriptions, reliable metadata search and access in the context of browsing increasingly difficult. There are three primary problems that affect metadata discovery in the context of browsing: the volume of metadata, the lack of uniformity in metadata, and the lack of uniformity in metadata. This paper will present a cross-standard metadata formatting structure that will allow compatibility between standards.

**Index Terms**— Metadata, metadata, cross-standard, metadata.

**I. INTRODUCTION**

In 2007, one of the world's top popular science video channels, YouTube, reported that it had received 100 million video uploads. At the time, YouTube was the only video platform that had received 100 million uploads. Today, YouTube is just one of many video platforms that have received 100 million uploads. The number of video uploads is increasing at a rapid rate, and this is true for all video platforms. The number of video uploads is increasing at a rapid rate, and this is true for all video platforms. The number of video uploads is increasing at a rapid rate, and this is true for all video platforms.

# IEEE activities (2)

I have written many articles, papers and other IEEE documents and am a reviewer

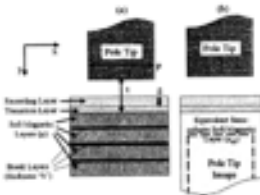
I have helped organize many IEEE events

I was a distinguished lecturer for the CT Soc.

### Effective Permeability and Imaging of Multilayered Soft Films for Perpendicular Recording Media

James E. Merson, Fellow, IEEE, and Thomas M. Coughlin, Senior Member, IEEE

**Abstract**—Thinner soft magnetic film layers show significant variation of effective permeability with wavevector or magnetic recording density. When the magnetic material is divided between several equally thick soft layers, the effective permeability of the magnetic film is reduced, particularly at lower wavevectors, for lower wavevectors and low field film permeabilities, the imaging factor for soft magnetic multilayered film can be significantly reduced, making writing high coercivity media more difficult. For single pole heads, a two-dimensional analysis of writing on a perpendicular medium shows that these effects become pronounced at high film permeabilities less than 10. Effects on recording field gradients are much less.



**Index Terms**—Magnetic film, multilayers, permeability, perpendicular media, recording, soft magnetic underlayer.

I. INTRODUCTION



# IEEE activities (3)

I am a frequent speaker at IEEE and other events & webinars

**IEEE DigitalReality** **TWITTER CHAT** **IEEE**

**AI in Digital Reality: This Ain't No Foolin' Around**

Wednesday, 7 October 2020 at 9am PT / 12pm ET

**FEATURING:**

- Tom Coughlin**  
President, Coughlin Associates  
IEEE Fellow
- Nicholas Napp**  
Co-Founder of Knack Labs, LLC

#IEEEDigitalRealityChat



**Dr. Tom Coughlin**  
Rising Stars 2020 Speaker  
President, Coughlin Associates  
IEEE USA President 2019

**RISING STARS CONFERENCE**

brilliant minds  
**BRIGHT FUTURES**  
IEEE SECTIONS CONGRESS 2017

**Tools for Section Chapter Meeting Recording and Distribution**

Tom Coughlin  
Past Director, Region 5  
VP IEEE USA Professional Activities

**Internet of Things (IoT)**

- Applications/Devices
- Architectures (Edge, Fog, Cloud)
- Privacy
- Security
- Informed consent
- Power
- Intermediation
- Government
- Standards
- Barriers to entry
- Leap frog competitive positioning
- Intellectual Property

Internet of Things (IoT)  
Thomas Coughlin (Coughlin & Associates Inc.)

**Tom Coughlin**  
IEEE Sr Member

**HD, 4K, 8K... then what?**

**IEEE Technology, DigitalTwin, DNA Storage and More**  
with *Tom Coughlin*

**IEEE CES ASIA 观察室**

**2020 Volunteer Leadership Training Program**

Dealing with Difficult People  
22 September 2020

Tom Coughlin – IEEE-USA Past President, former SCV Section Chair

**Consulting in California: Understanding AB 5, and Keeping Your Independence**

12 November 2019

**IEEE-CNSV**  
Consultancy Network of Section Chairs

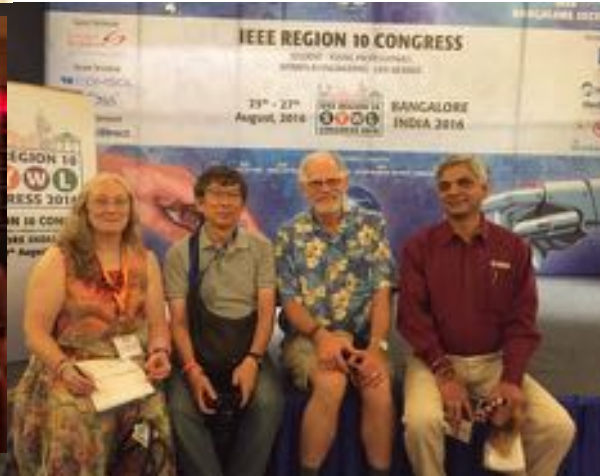
Featuring a panel of 4 speakers:

- Scott Berg
- Tom Coughlin
- Alan Hershman
- Chris Kucharski, CEO
- Christopher Mottishaw
- Mark Stauder

## IEEE activities (4)

I love meeting new people

I have been happy to travel and participate in many IEEE events over the years



## Some IEEE accomplishments

I chaired a 2019 IEEE BoD membership price adhoc that informed a recent initiative to offer reduced student and YP memberships

I got IEEE-USA to fund the creation of a set of videos featuring YPs (with the CS and PES) for membership promotion in the US, these will be used for IEEE member promotion for the 2021 membership campaign

As R6 Director I gave awards to several companies in the region, conducted senior member elevations for R6 company executives and promoted a campaign for local section volunteers in R6 to call non-renewing members

As IEEE NIC chair, I aligned proposal solicitations to the IEEE 2020-2025 strategic goals

As SCV section chair and SF Bay Area Council chair I promoted and then chaired the 2011 Sections Congress in San Francisco

I have been a recommender or nominator for about 100 senior members and fellows

I nominated the Apple I and Apple II IEEE Engineering Milestones

I have nominated a winner of the IEEE Edison Award and the Ibuka Award

I have made some cool IEEE shirts that folks seem to like



## What I am running for:

I would encourage diversity and inclusion in our membership, for we need new thoughts and approaches to solve the world's problems.

I want us to create surplus generating hybrid and virtual conference and networking models, to gain from our experience with Covid.

## What I am running for (2):

I want to leverage the broad information sources in the IEEE to create valuable tools for the generation and application of wisdom, even while enabling the easy flow of information, because we need income to survive.



## What I am running for (3):

I want the IEEE to identify what it is good at and focus on creating value from those skills, so we can make the most of who we are.



*"IEEE is my competitive edge"*



## What I am running for (4):

I want to grow our membership by helping to make IEEE an organization that , students, technical professionals (and especially young industry professionals) desire to belong to

and by enabling greater support for local activities where most of our members engage with the IEEE, so IEEE has greater value to industry and our local members.



## What I am running for (5):



I want to reach across the IEEE OUs so we may work together to present to the world an IEEE that is vital, essential, adventurous and fun, because **together, we are much more than the sum of our parts.**

Thanks for the opportunity to talk to you about why I would like to run for IEEE President-elect

**Please sign my petition to let me run in 2021!**

[www.ieee.org/petition](http://www.ieee.org/petition)

