Election to the grade of IEEE Fellow is one of the highest honors that can be bestowed upon our members by the Institute in recognition of their technical, educational, and leadership achievements. Only a select few IEEE members earn this prestigious honor.

Congratulations to the following Communications Society members for their election to the grade of Fellow of the IEEE. They now join company with a truly distinguished roster of colleagues.

RAY T. CHEN

**EDWIN CHONG** 

PHILIP A. CHOU

For contributions

to polymer-based

For contributions

to communication

networks and

discrete event

systems.

guided devices

for optical interconnects.

NIHAT BILGUTAY



For leadership in engineering education innovation.

CHATSCHIK BISDIKIAN

For contributions to the development, modeling, and analysis of communication protocols and wireless personal area networks.



# **DAU-CHYRH CHANG**



For technical leadership in antenna design and measurement systems.

SHIH-FU CHANG



For contributions to digital video and multimedia technologies.





For contributions to variational methods in information theory, signal processing, and compression.

**CASIMER DECUSATIS** For contributions to fiber optic data communication systems.



SERGE N. DEMIDENKO



# For contributions

to electronic testing.

ALY ELREFAIE



For contributions to optical and wireless communication systems.

# DEBORAH ESTRIN

For innovations in scalable network protocols and sensor network research.

## JAMES FARMER

For technical leadership in the cable television industry.





STEPHEN MARSHALL GOODNICK

**ROBERT ALEXANDER HANNA** 

For contributions to

carrier transport

semiconductor

devices.

fundamentals and

For contributions to

the applications of

medium voltage adjustable speed

drives and power quality.

## JULIE ELIZABETH FOUQUET



For contributions to optical switch and light-emitting device technologies.

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For contributions to robust control and signal estimation.

# THOMAS EDWARD FUJA



For contributions to error control coding.



# LAJOS HANZO For contributions to adaptive wireless communication

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For contributions to integrated circuits for high-speed communication systems.

## HAROLD KIRKHAM

For leadership in the field of optical measurements for power systems.

# AMOS LAPIDOTH

For contributions to robust communications under channel uncertainty.

# **VINCENT FRANCIS FUSCO**



For contributions to the design of active and self-tracking antenna technology.

# **EVAN LEE GOLDSTEIN**



For contributions to optical communications.



# MASAYUKI IZUTSU For contributions to

integrated optics and broadband guided-wave light modulators.

## KENNETH JAMES KERPEZ



For contributions to digital subscriber line technology and standards.



а.

# JEAN-YVES LEBOUDEC

For contributions to the theory and practice of service guarantees in packet networks.

11

HANS-ANDREA LOELIGER For contributions to group codes, iterative decoding, and analog implementation

of decoders.









MIKAEL OSTLING

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MICHAEL JOSEPH MCLAUGHLIN



For leadership in the development of spectrum management policies.



# **SEIICHI NAMBA**

For contributions to integrated digital broadcasting systems.

For contributions to

device technology

semiconductor

and education.

# SANJOY PAUL

For contributions to the design and development of communication network protocols.



## For leadership in optical and radio communications.



For contributions to the development of digital speech coding standards for wireless communications.

# Υυκου Μοςηίδα

For contributions to the development and deployment of digital transport systems.



## For contributions to variable microwave signal processing circuits and antennas.

For contributions

to antenna signal

communications.

processing and

wireless

**BJORN ERIK OTTERSTEN** 

S. RAMADORAI For leadership in the development of multidisciplinary



MOHAMAD A. H. SAWAN

For contributions to implantable medical devices.

DAVID BARRY SCOTT



For contributions to CMOS and BICMOS circuits.

# KOSO MURAKAMI



For contributions to switching technologies and systems for broadband communications networks.

# **RICHARD M. MURRAY**



For contributions to the theory of nonlinear control and its applications to robotics, flight control, and fluid systems.



**VLADIMIR PARIZHSKY** For contributions to modem technology and standards

# development.





M. IBRAHIM SEZAN



For technical leadership in digital image and video processing.



MICHAEL G. STRINTZIS For contributions

to digital filtering, image processing, and coding.

# WIM SWELDENS



ASRAR SHEIKH For contributions to railroad control systems.



For contributions to multiresolution methods for image and 3D geometry compression.



# STUART K. TEWKSBURY

For contributions to telecommunications and interconnections in high-performance digital systems.

# ISMAIL BURHAN TURKSEN

For contributions to fuzzy logic systems.



For contributions to wideband wireless transmission.



For contributions to the theory and development of microwave and optical devices using magnetic garnet thin films and patterned ferroelectric domains.

# PAUL GREGORY STEFFES



For contributions to the understanding of planetary atmospheres.

**DOUGLAS STRAIN** 



For leadership in the development of automated test and calibration systems.



TIENIU TAN For contributions to pattern recognition research and applications.

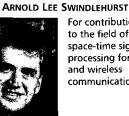
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# For leadership in the development of active networks.



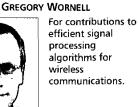
# **KEN-ICHI YUKIMATSU**

For contributions on photonic switching technologies and systems.



# For contributions to the field of space-time signal processing for radar and wireless communications.









## HONG-JIANG ZHANG



For contributions to media computing and leadership in content-based visual media analysis, retrieval, and browsing.



# YILIN ZHAO

For contributions to location and navigation technologies and systems.

## THOMAS JOSEPH BRAZIL

For contributions to circuit-level modeling of non-linear devices.

## STEVEN J. WALLACH

For contributions to high-performance computing.

### ZHEN ZHANG



For contributions to source coding theory and information inequalities.

# "... Inexpensive, high-bandwidth communications make it feasible for large work forces to be located and affectively managed anywhere... Any worker... is now in jeopardy of being replaced by a lower-paid equally skilled worker thousands of miles away." Schumer and Roberts, "(Second Thoughts on) Free Trade," N. Y. Times, January 6, 2004

SOLUTION TO PUZZLE 253

- Switching network Α
- В Call processing
- c Hands-off
- D Unknowns
- E F Maxwells equations
- Eye
- G Rome
- н Aide t
  - Naive

1	Doer
Κ	Rake
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М	Bow-wave
Ν	Ebbed
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P	Telepathy
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- Sakagawea Fiscally
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Erbium doped fiber

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- х Anti
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