

IACADEME

SEMI-ANNUAL JOURNAL OF INFORMATION TECHNOLOGY



Dr. Bruce Suter Retirement

(Adapted from Dr. Suter's retirement ceremony, with permission from his supervisor, Dr. Donald Telesca.)

It is with great honor and respect that we recognized Dr. Bruce Suter upon his retirement from the Information Directorate (RI), Air Force Research Laboratory (AFRL), Air Force Materiel Command (AFMC), Rome, New York. His contributions through the Information Institute have exceedingly proven valuable in mentorship and partnership with academia and the laboratory. We sincerely thank him for his contributions. His influence will continue to affect future scientists and engineers, faculty and students.

In recognition of his distinguished performance in support of the United States Air Force from 2 Oct 1989 to 31 Oct 2019, Dr. Bruce W. Suter has been recommended for the Outstanding Civilian Career Service Award, most notably as a Principle Electronics Engineer, Computing and Communications Division (RIT).

Dr. Bruce Suter's early career work was as a professor at the Air Force Institute of Technology (AFIT), where he was instrumental in contributing to and leading development of multirate and wavelet signal processing technology and associated applications. His early work contributed greatly to the state-of-the-art in signal/image processing, communications, and machine learning for the United States Air Force. Throughout his career he exemplified expert in-house research skills on efforts spanning the spectrum of basic and applied research. From 2001 to 2007, Dr. Suter was director and chief scientist of the AFRL/AFOSR Center for Integrated Transmission and Exploitation (CITE), a center of excellence focused on the paradigm "sense then adapt", which is a common theme in both communications and exploitation. From 2007 to 2013, Dr. Suter worked with the Office of the Under Secretary of Defense to obtain a better understanding of the science and engineering of wireless computational networks, while enabling new applications. Recently, Dr. Suter has focused on big data and the associated growing gap between the amount of data generated and the amount of data that can be stored, communicated, and processed. The above work resulted in several patents. They include: a low power, high performance fast Fourier transform processor; an efficient paradigm for processing of similar images to permit a reduction in storage and associated transmission delays; and a technique to enable the decoder in a network coding system to begin processing prior to receiving



Our Mission

Strengthen and Expand Information Technology Research within the Information Directorate.

Develop collaborative relationships among and between the academic members and the Information Directorate.

Increase research emphasis in areas of information technologies critical to the Information Directorate's mission.

Consider introducing a student to the 2020 summer research experience at AFRL/RI

For more information and to access the application, go to

<http://www.wpafb.af.mil/Welcome/Fact-Sheets/Display/Article/836756/afrlri-information-institute/>

To submit other mentor faculty/student stories, please send to

rrs.iweb@us.af.mil

all associated packets. Due to Dr. Suter's outstanding work, he was recognized by his peers as a distinguished scientist through the following awards: General Ronald W. Yates Award for Excellence in Technology Transfer, Arthur S. Fleming Award, IEEE Harry Diamond Award, and recognition as a Fellow by both IEEE and AFRL. In addition, Dr. Suter was also an outstanding science and technology mentor, expertly mentoring a broad spectrum of people from junior level employees to high school/college interns to professors. His career had a positive impact on all who were exposed to him, including his peers at AFIT and AFRL, and most notably the Air Force warfighters who were the end user recipients of the technology he developed.

The distinctive accomplishments of Dr. Bruce W. Suter culminate a long and distinguished career with the United States Government and reflect great credit upon himself and the United States Air Force.

Information Institute 2019 Summer Visiting Faculty Programs

Participants from 30 Universities

- Alabama A&M University
- Arizona State University
- Binghamton University (SUNY)
- Brescia University
- Clarkson University
- Embry-Riddle Aeronautical University
- Fairleigh Dickinson University
- Florida Atlantic University
- Iowa State University
- Kansas State University
- Lehman College
- Montclair State University
- Oklahoma State University
- Rensselaer Polytechnic Institute
- Rochester Institute of Technology
- SUNY Polytechnic Institute
- Syracuse University
- Temple University
- The Pennsylvania State University
- The University of Tulsa
- Universidad del Turabo
- University at Buffalo (SUNY)
- University of California – Riverside
- University of Central Florida
- University of Nevada – Las Vegas
- University of South Carolina
- University of Texas – Dallas
- Virginia Commonwealth University
- West Virginia University
- Wichita State University

Achievements and Awards

Michael S. Gudaitis, II Topic Advisor

Major General John C. Toomay Award, 2018

Michael L. Fanto, II Topic Advisor

Oliver G. Tallman Award, 2018

Dr. Timothy Kroecker, II Topic Advisor

RI Diversity Award, 2018

Clare D. Thiem, II Topic Advisor

General Robert C. Mathis Award, 2018

Dr. Qing Wu, II Topic Co-Advisor

Senior Leadership Advancement from Technical Advisor (Computing and Communications Division) to Senior Scientist (Processing and Exploitation). Both positions with the Air Force Research Laboratory, Air Force Materiel Command, Rome, NY.

Dr Tim Kroecker, II Topic Advisor

NAACP Roy Wilkins Renowned Service Award, 2019

Dr. Ngwe Thawdar, II Topic Advisor

AFRL Science and Engineering Early Career Award Recipient, 2019

Qing Wu, II Topic Co-Advisor

AFRL Fellow under the Technology Development and Transition Achievements category, 2019

Recently Naturalized Citizens

Dr. Dmitry Uskov, Brescia University.....May 2019

II Office Anniversaries

Dr, Andy Noga, II Director.....3 years, June 2019

Ms. Elizabeth Schlaegel Kelly.....8 years, October 2019

II Participation Milestones for 2019 *(data from historical records beginning in 2003)*

Dr. James Stine, Oklahoma State University 10 years

Dr. Rong Pan, Arizona State University.....5 years

Dr. David Schaffer, Binghamton University...5 years

Dr. Dmitry Uskov, Brescia University.....5 years

Summer Program Statistics

Summer Faculty & Students by Division

- 53** Summer Researchers
42 Faculty and 11 Students accompanying faculty
- 8** RIS | Information Systems
- 9** RIE | Information Intelligence Systems and Analysis
- 13** RIG | Information Exploitation and Operations
- 23** RIT | Computing and Communications

Summer Faculty & Students by State

- | | | | |
|---|----------------|----|----------------|
| 1 | Alabama | 1 | Nevada |
| 3 | Arizona | 18 | New York |
| 2 | California | 3 | Oklahoma |
| 6 | Florida | 5 | Pennsylvania |
| 1 | Iowa | 2 | Puerto Rico |
| 2 | Kansas | 1 | South Carolina |
| 1 | Kentucky | 1 | Texas |
| 1 | North Carolina | 1 | Virginia |
| 3 | New Jersey | 2 | West Virginia |

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Click to follow and receive notifications for announcements and activity happening through the Information Institute

<https://www.linkedin.com/company/information-institute/>

The Information Institute® FY19 SFFP, VFRP Participants and II Members

Membership (blue) as of October 2019 and FY19 Participant (orange) "Heat Map"



APPLICATION DEADLINES!

Summer Faculty Fellowship Program (SFFP)

<http://afsffp.sysplus.com/>

Application Deadline: November 29, 2019

Open to:

- US citizens only
- Master degree students accepted with faculty mentor
- PhD degree students accepted with faculty mentor

Visiting Faculty Research Program (VFRP)

<https://www.wpafb.af.mil/Welcome/Fact-Sheets/Display/Article/836756/afrlri-information-institute/>

Application Deadline: January 19, 2020

Open to:

- US citizen and lawful permanent resident
- Completed freshman year through PhD student accepted with faculty mentor

National Defense Science and Engineering Graduate (NDSEG) Fellowship Program

<https://ndseg.sysplus.com/>

Application Deadline: December 6, 2019

Open to:

- US citizens or US nationals (dual citizens may apply)
- Completed undergraduate senior year (degree must be received prior to fellowship start date)
- Recent bachelor's degree recipients
- Graduate students (first year, second year)
- Recent master's degree recipients
- Predoctoral students (first year, second year)
- Dual MD-PHD students
- Dual PSYD-PHD students



INFORMATION INSTITUTE

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