Assoc. Prof. SEVİNÇ FİGEN ÖKTEM

Personal Information

Office Phone: +90 312 210 2342
Fax Phone: +90 312 210 2304
Email: figeno@metu.edu.tr
Web: https://blog.metu.edu.tr/figeno/

International Researcher IDs
ScholarID: DW2sZ_0AAAAJ
ORCID: 0000-0002-7882-5120
Publons / Web Of Science ResearcherID: A-9569-2018
ScopusID: 35103071500
Yoksis Researcher ID: 223888

Biography

I am an Associate Professor of Electrical and Electronics Engineering at METU, and the principal investigator of the Signal Processing And Computational sEnsing (SPACE) Lab. Before joining METU, I was a Post-Doctoral Research Associate with the NASA Goddard Space Flight Center, where I worked on the development of novel spectral imaging techniques for high-resolution solar imaging.

I received the Ph.D. degree from the University of Illinois at Urbana-Champaign (UIUC) in 2014, and the B.S. and M.S. degrees from Bilkent University, in 2007 and 2009, respectively. At UIUC, I was selected to the "List of Teachers Ranked as Excellent by Their Students", and was a recipient of the Professor Kung Chie Yeh Endowed Fellowship in 2012, and a NASA Earth and Space Science Fellowship from 2012 to 2014.

Education Information

Doctorate, University of Illinois at Urbana-Champaign, Mühendislik Fakültesi, Electrical and Computer Engineering, United States Of America 2009 - 2014
Postgraduate, Ihsan Dogramaci Bilkent University, Institute Of Engıneerıng And Natural Scıences, Elektrik Ve Elektronik Mühendisliği (Yl) (Tezli), Turkey 2007 - 2009
Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, Turkey 2003 - 2007

Dissertations

Postgraduate, Signal representation and recovery under partial information, redundancy, and generalized finite extent constraints, Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği (Yl) (Tezli), 2009
Doctorate, Computational imaging and inverse techniques for high-resolution and instantaneous spectral imaging, University Of Illinois At Urbana-Champaign, 2009

Research Areas

Electrical and Electronics Engineering

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2021 - Continues
Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2018 - 2021
Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering, 2015 - 2018
Research Assistant PhD, Heliophysics Division, 2014 - 2014
Research Assistant, University of Illinois at Urbana-Champaign, Mühendislik Fakültesi, Elektrik ve Bilgisayar Mühendisliği, 2009 - 2014
Research Assistant, Heliophysics Science Division, 2012 - 2012
Research Assistant, Ihsan Dogramaci Bilkent University, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, 2007 - 2009
Researcher, 2006 - 2006

Courses

Theory of Remote Image Formation, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2017 - 2018, 2016 - 2017, 2015 - 2016
Probability and Random Variables, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Digital Image Processing, Postgraduate, 2021 - 2022, 2020 - 2021
Vector Space Methods in Signal Processing, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
Statistical Signal Processing and Modeling, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018
Signals and Systems I , Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Advising Theses

ÖKTEM S. F., Deep learning-based reconstruction methods for near-field mimo radar imaging, Postgraduate, İ.MANİSALI(Student), 2022
Öktem S. F., Compressive spectral imaging using diffractive lenses and multi-spectral sensors with learned reconstruction and joint optimization, Postgraduate, U.GÜNDOĞAN(Student), 2022
Öktem S. F., Koç S. S., Sparse reconstruction for near-field MIMO radar imaging problems using fast multipole methods, Doctorate, E.ALP(Student), 2022
Öktem S. F., Deep learning-based unrolled reconstruction methods for computational imaging, Postgraduate, C.DENİZ(Student), 2021
Öktem S. F., Evaluation of classical and sparsity-based methods for parametric recovery problems, Postgraduate, H.CAN(Student), 2020
Öktem S. F., Efficient algorithms for convolutional inverse problems in multidimensional imaging, Postgraduate, D.DOĞAN(Student), 2020
Öktem S. F., Development of novel analysis and reconstruction techniques for coherent optical imaging systems, Postgraduate, Ç.IŞIL(Student), 2019
Öktem S. F., Computational spectral imaging techniques using diffractive lenses and compressive sensing, Postgraduate,

O.FATİH(Student), 2019
ÖKTEM S. F., Optimal design of sparse mimo arrays for wideband near-field imaging based on a statistical framework, Postgraduate, M.BURAK(Student), 2018
ÖKTEM S. F., Numerical and experimental evaluation of computational spectral imaging with photon sieves, Postgraduate, T.ALKANAT(Student), 2016

Designed Lessons

Öktem S. F., Vector Space Methods in Signal Processing, Undergraduate, 2018 - 2019
Öktem S. F., Theory of Remote Image Formation, Postgraduate, 2015 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Enhanced Near-Field Microwave Imaging System with Polarization Diversity**
Dalkilic A., ÖKTEM S. F., ALATAN L.
IEEE Antennas and Wireless Propagation Letters, vol.23, no.3, pp.1085-1089, 2024 (SCI-Expanded)

II. **Plug-and-Play Regularization on Magnitude with Deep Priors for 3D Near-Field MIMO Imaging**
ORAL O., ÖKTEM S. F.
IEEE Transactions on Computational Imaging, vol.10, pp.762-773, 2024 (SCI-Expanded)

III. **Efficient physics-based learned reconstruction methods for real-time 3D near-field MIMO radar imaging**
Manisali I., ORAL O., ÖKTEM S. F.
Digital Signal Processing: A Review Journal, vol.144, 2024 (SCI-Expanded)

IV. **Computational optical sensing and imaging 2021: feature issue introduction**
Ke J., Alieva T., Öktem S. F., Silveira P. E., Wetzstein G., Willomitzer F.
Optics Express, vol.30, no.7, pp.11394-11399, 2022 (SCI-Expanded)

V. **Computational Optical Sensing and Imaging 2021: introduction to the feature issue**
Ke J., Alieva T., Öktem S. F., Silveira P. E. X., Wetzstein G., Willomitzer F.
Applied Optics, vol.61, no.9, 2022 (SCI-Expanded)

VI. **High-Resolution Multi-Spectral Imaging With Diffractive Lenses and Learned Reconstruction**
Öktem S. F., Kar O. F., Bezek C. D., Kamalabadi F.
IEEE TRANSACTIONS ON COMPUTATIONAL IMAGING, vol.7, pp.489-504, 2021 (SCI-Expanded)

VII. **Sparse Reconstruction for Near-Field MIMO Radar Imaging Using Fast Multipole Method**
Miran E. A., ÖKTEM S. F., Koc S.
IEEE ACCESS, vol.9, pp.151578-151589, 2021 (SCI-Expanded)

VIII. **Efficient computation of 2D point-spread functions for diffractive lenses**
Ayazgok S., Oktem F. S.
APPLIED OPTICS, vol.59, no.2, pp.445-451, 2020 (SCI-Expanded)

IX. **Image Chain Simulation for Earth Observation Satellites**
Alici K. B., Oktem F. S., Karci O., Yilmaz A. S., Selimoglu O.
IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING, vol.12, no.10, pp.4014-4023, 2019 (SCI-Expanded)

X. **Slitless Solar Imaging Spectroscopy**
Davila J. M., Oktem F. S., Kamalabadi F.
ASTROPHYSICAL JOURNAL, vol.883, no.1, 2019 (SCI-Expanded)

XI. **Compressive spectral imaging with diffractive lenses**
Kar O. F., Oktem F. S.
OPTICS LETTERS, vol.44, no.18, pp.4582-4585, 2019 (SCI-Expanded)

XII. **Deep iterative reconstruction for phase retrieval**

Isil C., Oktem F. S., Koc A.
APPLIED OPTICS, vol.58, no.20, pp.5422-5431, 2019 (SCI-Expanded)

XIII. **Sparsity-based three-dimensional image reconstruction for near-field MIMO radar imaging**
Oktem F. S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, no.5, pp.3282-3295, 2019 (SCI-Expanded)

XIV. **Analytical Fresnel imaging models for photon sieves**
ÖKTEM S. F., Kamalabadi F., Davila J. M.
OPTICS EXPRESS, vol.26, no.24, pp.32259-32279, 2018 (SCI-Expanded)

XV. **Periodic aperture imaging**
Alici K. B., Buyuk H., Yilmaz A. S., Ozdemir C., Karci O., Oktem F. S., Selimoglu O.
OPTICAL ENGINEERING, vol.56, no.5, 2017 (SCI-Expanded)

XVI. **Effect of spatial distribution of partial information on the accurate recovery of optical wave fields**
ÖKTEM S. F., Ozaktas H. M.
APPLIED OPTICS, vol.56, no.1, 2017 (SCI-Expanded)

XVII. **A Parametric Estimation Approach to Instantaneous Spectral Imaging**
Öktem S. F., Kamalabadi F., Davila J. M.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.23, no.12, pp.5707-5721, 2014 (SCI-Expanded)

XVIII. **Phase-space window and degrees of freedom of optical systems with multiple apertures**
Ozaktas H. M., Oktem F. S.
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, vol.30, pp.682-690, 2013 (SCI-Expanded)

XIX. **Equivalence of linear canonical transform domains to fractional Fourier domains and the bicanonical width product: a generalization of the space-bandwidth product**
Oktem F. S., Ozaktas H. M.
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, vol.27, pp.1885-1895, 2010 (SCI-Expanded)

XX. **Exact Relation Between Continuous and Discrete Linear Canonical Transforms**
Öktem S. F., Özaktaş M. H.
IEEE SIGNAL PROCESSING LETTERS, vol.16, no.8, pp.727-730, 2009 (SCI-Expanded)

Books & Book Chapters

I. **Computational Spectral and Ultrafast Imaging via Convex Optimization**
Öktem S. F., Gao L., Kamalabadi F.
in: Handbook of Convex Optimization Methods in Imaging Science, Vishal Monga, Editor, Springer, London/Berlin , Zug, pp.105-127, 2018

II. **Fast Algorithms for Digital Computation of Linear Canonical Transforms**
Koç A., Öktem S. F., Özaktaş M. H., Kutay A.
in: Linear Canonical Transforms, Alper M Kutay,Haldun M Ozaktas,John J Healy,John T Sheridan, Editor, Springer-Verlag , New-York, pp.293-327, 2016

III. **Linear Canonical Domains and Degrees of Freedom of Signals and Systems**
Öktem S. F., Ozaktas H.
in: Linear Canonical Transforms, Healy John J,Kutay M Alper,Ozaktas Haldun M,Sheridan John T, Editor, Springer, London/Berlin , New-York, pp.197-239, 2016

Refereed Congress / Symposium Publications in Proceedings

I. **Plug-and-Play Reconstruction with 3D Deep Prior for Complex-Valued Near-Field MIMO Imaging**

ORAL O., ÖKTEM S. F.
31st European Signal Processing Conference, EUSIPCO 2023, Helsinki, Finland, 4 - 08 September 2023, pp.496-500

II. **Deep learning-based reconstruction for near-field MIMO radar imaging**
Manisali I., ÖKTEM S. F.
31st European Signal Processing Conference, EUSIPCO 2023, Helsinki, Finland, 4 - 08 September 2023, pp.481-485

III. **Deep Learning-Based Joint Reconstruction and System Optimization for Single-Shot Compressive Spectral Imaging**
Gundogan U., Öktem S. F.
Computational Optical Sensing and Imaging, COSI 2022, Vancouver, Canada, 11 - 15 July 2022

IV. **Computational Spectral Imaging With Diffractive Lenses And Spectral Filter Arrays**
Gundogan U., ÖKTEM S. F.
2021 IEEE International Conference on Image Processing (ICIP), Anchorage, United States Of America, 19 - 22 September 2021, pp.2938-2942

V. **Unrolling-Based Deep Reconstruction for Compressive Spectral Imaging**
BEZEK C. D., ÖKTEM S. F.
Computational Optical Sensing and Imaging 2021, Canada, 19 - 23 July 2021

VI. **Comparison of Dictionary-Based Image Reconstruction Algorithms for Inverse Problems**
Dogan D., ÖKTEM S. F.
28th Signal Processing and Communications Applications Conference, Turkey, 5 - 07 October 2020

VII. **Analysis of Alternative Performance Metrics for Compressive Spectral Imaging**
Gundogan U., ÖKTEM S. F.
28th Signal Processing and Communications Applications Conference, Turkey, 5 - 07 October 2020

VIII. **Evaluation of Sparsity-based Methods for Parameterized Source Separation**
Baskaya H. C., ÖKTEM S. F.
28th Signal Processing and Communications Applications Conference, Turkey, 5 - 07 October 2020

IX. **Deep CNN Prior Based Image Reconstruction for Multispectral Imaging**
Manisali İ., Cam R., BEZEK C. D., ÖKTEM S. F.
28th Signal Processing and Communications Applications Conference, Turkey, 5 - 07 October 2020

X. **Model-based Phase Retrieval with Deep Denoiser Prior**
Işıl Ç., ÖKTEM S. F.
2020 OSA Imaging and Applied Optics Congress, 22 - 26 June 2020

XI. **Model-based Inversion Methods for Compressive Spectral Imaging with Diffractive Lenses**
Dogan D., ÖKTEM S. F.
2020 OSA Imaging and Applied Optics Congress, 22 - 26 June 2020

XII. **Computational Imaging and Inverse Problems: Making the Invisible Visible**
ÖKTEM S. F.
21. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, İstanbul, Turkey, 06 September 2019

XIII. **Anlık Spektral Görüntüleme için Tasarım Eniyileme**
Ayazgok S., Öktem S. F.
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019

XIV. **Snapshot Spectral Imaging with Generalized Photon Sieves**
Ayazgok S., ÖKTEM S. F.
OSA Imaging and Applied Optics Congress, Munich, Germany, 24 - 27 June 2019

XV. **Convolutional Inverse Problems in Imaging with Convolutional Sparse Models**
Dogan D., ÖKTEM S. F.
OSA Imaging and Applied Optics Congress, Munich, Germany, 24 - 27 June 2019

XVI. **Deep Learning-Based Hybrid Approach for Phase Retrieval**
IŞIL Ç., ÖKTEM S. F., KOÇ A.
OSA Imaging and Applied Optics Congress, Munich, Germany, 24 - 27 June 2019

XVII. **Fast Computational Spectral Imaging with a Programmable Diffractive Lens**
Kar O. F., ÖKTEM S. F.

OSA Imaging and Applied Optics Congress, Munich, Germany, 24 - 27 June 2019

XVIII. **Image deconvolution via efficient sparsifying transform learning Hizli Seyreklęstirici Dönüsüm Öğrenme ile Görüntü Ters Evrisimi**
Akyon F., Kamaci U., Öktem S. F.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4

XIX. **Image restoration for sparse aperture optical systems Seyrek açiklikli optik sistemler için imge onarimi**
Iskender B., Oktem F. S.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4

XX. **A Phase-Space Approach to Diffraction-Limited Resolution**
Işıl Ç., Öktem S. F.
Imaging and Applied Optics 2018 (3D, AO, AIO, COSI, DH, IS, LACSEA, LSC, MATH, pcAOP), Florida, United States Of America, 25 - 28 June 2018

XXI. **Compressive Photon-Sieve Spectral Imaging**
Kar O. F., Kamaci U., Akyon F., Öktem S. F.
Imaging and Applied Optics 2018 (3D, AO, AIO, COSI, DH, IS, LACSEA, LSC, MATH, pcAOP), Florida, United States Of America, 25 - 28 June 2018

XXII. **Diffusion tensor magnetic resonance electrical impedance tomography versus magnetic resonance conductivity tensor imaging**
Sadighi M., Öktem S. F., Eyüboğlu B. M.
International Society of Magnetic Resonance in Medicine ESMRMB Joint Annual Meeting, Paris, France, 16 - 21 June 2018, vol.26, pp.1-4

XXIII. **Effect of different sparsity priors on compressive photon-sieve spectral imaging**
Kar O. F., Öktem S. F., Kamaci U., Akyon F. C.
2018 26th Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018

XXIV. **UWB 3D Near-Field Imaging with a Sparse MIMO Antenna Array for Concealed Weapon Detection**
Anadol E., Seker I., Camlica S., Topbas T. O., Koc S., Alatan L., Oktem F., Civi O. A.
Conference on Radar Sensor Technology XXII, Florida, United States Of America, 16 - 18 April 2018, vol.10633

XXV. **Optimal Design of Sparse MIMO Arrays for Near-Field Ultrawideband Imaging**
Kocamis M. B., ÖKTEM S. F.
25th European Signal Processing Conference (EUSIPCO), Greece, 28 August - 02 September 2017, pp.1952-1956

XXVI. **OTF Analysis of a Spaceborne CMOS Imaging Sensor**
Alici K. B., Karci O., Yilmaz A. S., Ozdemir C., ÖKTEM S. F., Selimoglu O.
8th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 19 - 22 June 2017, pp.133-138

XXVII. **Çok Genişbantlı Mikrodalga Görüntüleme için Optimal MIMO Dizilimi**
Kocamis B., ÖKTEM S. F.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, Turkey, 15 - 18 May 2017

XXVIII. **Optimal MIMO Array Configuration for Ultrawideband Microwave Imaging**
Kocamis M. B., ÖKTEM S. F.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

XXIX. **EFFICIENT SPARSITY-BASED INVERSION FOR PHOTON-SIEVE SPECTRAL IMAGERS WITH TRANSFORM LEARNING**
Kamaci U., Akyon F. C., Alkanat T., Oktem F. S.
5th IEEE Global Conference on Signal and Information Processing (GlobalSIP), Montreal, Canada, 14 - 16 November 2017, pp.1225-1229

XXX. **Milli Arcsecond Imaging of the Solar Corona**
Joseph D., ÖKTEM S. F., FARZAD K.

41st COSPAR Scientific Assembly (cancelled), 30 July - 07 August 2016

XXXI. **Computational image formation with photon sieves for milli arcsecond solar imaging**
ÖKTEM S. F., Kamalabadi F., Davila J.
41st COSPAR Scientific Assembly (cancelled), 30 July - 07 August 2016

XXXII. **Fast Computation of Two Dimensional Point Spread Functions forPhoton Sieves**
ÖKTEM S. F., Alkanat T.
OSA Imaging and Applied Optics Congress 2016, 25 - 28 July 2016

XXXIII. **Foton Süzgeci ile Hesaplamalı Spektral Görüntüleme**
ÖKTEM S. F., Kamalabadi F., Davila J. M.
24th Signal Processing and Communications Applications Conference, Turkey, 16 - 19 May 2016

XXXIV. **Milli Arcsecond MAS Imaging of the Solar Corona**
Davila J. M., ÖKTEM S. F., Kamalabadi F., ONeill J., Gradac A. M. N., Daw A. N., Rabin D. M.
AAS/Solar Physics Division Meeting, 31 May - 03 June 2016

XXXV. **Computational Spectral Imaging with Photon Sieves**
ÖKTEM S. F., Kamalabadi F., Davila J. M.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.425-428

XXXVI. **Exploring the Photon Sieve: Mathematical Framework and Experimental Categorization**
ONeill J., Davila J. M., ÖKTEM S. F., Daw A.
Next Generation Instrumentation in Solar and Space Physics: Critical Measurements From Low Cost Missions/Platforms, AGU Fall Meeting, 15 - 19 December 2014

XXXVII. **High-Resolution Solar Imaging With Photon Sieves**
ÖKTEM S. F., Kamalabadi F., Davila J. M.
American Geophysical Union, Fall Meeting, 15 - 19 December 2014

XXXVIII. **Slitless Solar Spectroscopy**
Kamalabadi F., ÖKTEM S. F., Davila J. M.
American Geophysical Union, Fall Meeting, 15 - 19 December 2014

XXXIX. **High resolution computational spectral imaging with photon sieves**
Öktem S. F., Kamalabadi F., Davila J.
IEEE Int. Conf. on Image Processing (ICIP), Paris, France, 27 - 30 October 2014

XL. **Imaging Techniques for High-Resolution and Instantaneous Observations of the Solar Corona**
ÖKTEM S. F., Kamalabadi F., Davila J. M.
7th Solar Information Processing Workshop, 18 - 21 August 2014

XLI. **Slitless solar spectroscopy**
ONeill J., Davila J. M., ÖKTEM S. F.
224th American Astronomical Society Meeting, 1 - 05 June 2014

XLII. **Parameter estimation for instantaneous spectral imaging**
ÖKTEM S. F., Kamalabadi F., Davila J. M.
IEEE Int. Conf. on Acoustic Speech and Signal Processing (ICASSP), 4 - 09 May 2014

XLIII. **Linear Canonical Transforms, Degrees of Freedom, and Sampling in Optical Signals and Systems**
ÖZAKTAŞ M. H., ÖKTEM S. F.
22nd Signal Processing and Communications Applications Conference (SIU), Turkey, 23 - 25 April 2014

XLIV. **Image formation model for photon sieves**
ÖKTEM S. F., Davila J., Kamalabadi F.
IEEE Int. Conf. on Image Processing (ICIP), 15 - 18 September 2013

XLV. **Degrees of freedom of optical systems and signals with applications to sampling and system simulation**
ÖKTEM S. F., ÖZAKTAŞ M. H.
2013 OSA Imaging Systems and Applications (IS), 23 - 27 June 2013

XLVI. **Condition number in recovery of signals from partial fractional Fourier domain information**
ÖKTEM S. F., ÖZAKTAŞ M. H.

OSA Adaptive Optics: Methods, Analysis and Applications 2013, 23 - 27 June 2013

XLVII. **Cramer Rao bounds and instrument optimization for slitless spectroscopy**
ÖKTEM S. F., Kamalabadi F., Davila J.
IEEE Int. Conf. on Acoustic Speech and Signal Processing (ICASSP), 26 - 31 May 2013

XLVIII. **Multi-order slitless solar spectroscopy: a parametric inversion approach**
ÖKTEM S. F., Kamalabadi F., Davila J. M.
6th Solar Information Processing Workshop, 13 - 16 August 2012

XLIX. **Analytical precision limits in slitless spectroscopy**
ÖKTEM S. F., Kamalabadi F.
2012 IEEE Statistical Signal Processing Workshop (SSP), 5 - 08 August 2012

L. **Schulz-Snyder Phase Retrieval Algorithm as an Alternating Minimization Algorithm**
ÖKTEM S. F., Blahut R. E.
2011 OSA Computational Optical Sensing and Imaging (COSI), 10 - 14 July 2011

LI. **Linear Algebraic Analysis of Fractional Fourier Domain Interpolation**
ÖKTEM S. F., Ozaktas H. M.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.158-161

Supported Projects

ÖKTEM S. F., Project Supported by Higher Education Institutions, En iyi optik tasarım ve örnekleme için uzam-frekans uzayına dayalı teknikler geliştirilmesi, 2015 - 2022
ÖKTEM S. F., TUBITAK Project, Foton-Süzgeci Ile Sıkıştırılmış Spektral Görüntüleme: Modeller, Algoritmalar, Ve Deneysel Uygulama, 2018 - 2021
Öktem S. F., Project Supported by Other Official Institutions, İMECE-Uydu Alt Yapısı Geliştirilmesi, 2018 - 2018
Vural E., Öktem S. F., TUBITAK Project, Düşük boyutlu veri kümeleri için grafa dayalı transfer öğrenme, 2017 - 2018
Öktem S. F., Koç S. S., Candan Ç., Tanık Y., Kuzuoğlu M., Aydın Çivi H. Ö., Orguner U., Project Supported by Other Private Institutions, ÇAFRAD Projesi Teknoloji/Konsept Gösterim Fazı (ÇAFRAD FAZ-1) Projesi, 2014 - 2018
Öktem S. F., Project Supported by Other Official Institutions, İMECE-Uydu Alt Yapısı Geliştirilmesi, 2017 - 2017
Öktem S. F., Alatan L., Aydın Çivi H. Ö., Koç S. S., Alatan A. A., Candan Ç., Ergül Ö. S., Project Supported by Other Private Institutions, 3-boyutlu Güvenlik Görüntüleme Radarı Projesi - Elekromanyetik Modelleme, Simülasyon ve Çözüm Yöntemleri, 2015 - 2017
Öktem S. F., Project Supported by Other Official Institutions, İMECE-Uydu Alt Yapısı Geliştirilmesi, 2016 - 2016

Activities in Scientific Journals

OPTICS EXPRESS, Special Issue Editor, 2021 - 2022
APPLIED OPTICS, Special Issue Editor, 2021 - 2022

Memberships / Tasks in Scientific Organizations

IEEE SPS Turkey Chapter, Country Representative, 2022 - Continues, United States Of America
IEEE Women in Signal Processing Sub-Committee on Grade Elevation, Nominations and Awards, Member, 2021 - Continues, United States Of America

Scientific Refereeing

OPTICS EXPRESS, Journal Indexed in SCI-E, December 2022

IET SIGNAL PROCESSING, Journal Indexed in SCI-E, November 2022
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Havelsan, Turkey, August 2022
IEEE TRANSACTIONS ON IMAGE PROCESSING, SCI Journal, July 2022
ICIP 2022, Conference Paper (Full Text), May 2022
ICIP 2022, Conference Paper (Full Text), May 2022
ICIP 2022, Conference Paper (Full Text), May 2022
SCIENTIFIC REPORTS, SCI Journal, May 2022
SIGNAL PROCESSING, Journal Indexed in SCI-E, January 2022
Erasmus Project, Erasmus Project, National Level, Türkiye Fulbright Eğitim Komisyonu, Turkey, January 2022
TUBITAK Project, 1002 - Quick Support Program, Middle East Technical University, Turkey, September 2021
SIGNAL PROCESSING, SCI Journal, August 2021
IEEE Sensors Letters, SCI Journal, June 2021
SIU 2021, Conference Paper (Full Text), May 2021
Theory of Remote Image Formation, Textbook Published by Renowned Publishing Houses, March 2021
APPLIED OPTICS, SCI Journal, February 2021
OPTICS EXPRESS, SCI Journal, February 2021
ICASSP 2021, Conference Paper (Full Text), January 2021
ICASSP 2021, Conference Paper (Full Text), January 2021
IEEE ACCESS, SCI Journal, January 2021
ICASSP 2021, Conference Paper (Full Text), January 2021
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, SCI Journal, November 2020
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, SCI Journal, November 2020
TUBITAK Project, 1501 - Industry R & D Projects Support Program, MAMUR TEKNOLOJI SISTEMLERI SANAYI ANONIM ŞIRKETI, Turkey, November 2020
OPTICS EXPRESS, SCI Journal, June 2020
OPTICS LETTERS, SCI Journal, June 2020
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, SCI Journal, March 2020
SIU 2020, Conference Paper (Full Text), February 2020
SIU 2020, Conference Paper (Full Text), February 2020
SIU 2020, Conference Paper (Full Text), February 2020
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, February 2020
SIU 2020, Conference Paper (Full Text), February 2020
SIU 2020, Conference Paper (Full Text), February 2020
ICASSP 2020, Conference Paper (Full Text), January 2020
ICASSP 2020, Conference Paper (Full Text), January 2020
ICASSP 2020, Conference Paper (Full Text), January 2020
ICASSP 2020, Conference Paper (Full Text), January 2020
Journal Of The Optical Society Of America A-Optics Image Science And Vision, SCI Journal, December 2019
TUBITAK Project, 1002 - Quick Support Program, Middle East Technical University, Turkey, December 2019
ICCV 2019 Workshop on Learning for Computational Imaging (LCI): Sensing, Reconstruction, and Analysis (https://sites.google.com/view/iccv-lci2019/home), Conference Paper (Full Text), August 2019
ICCV 2019 Workshop On Learning For Computational Imaging (LCI): Sensing, Reconstruction, And Analysis (Https://Sites.Google.Com/View/Iccv-Lci2019/Home), Conference Paper (Full Text), August 2019
ICCV 2019 Workshop On Learning For Computational Imaging (LCI): Sensing, Reconstruction, And Analysis (Https://Sites.Google.Com/View/Iccv-Lci2019/Home), Conference Paper (Full Text), August 2019
IEEE TRANSACTIONS ON IMAGE PROCESSING, SCI Journal, May 2019
IEEE TRANSACTIONS ON IMAGE PROCESSING, SCI Journal, March 2019
SIU 2019, Conference Paper (Full Text), February 2019
SIU 2019, Conference Paper (Full Text), February 2019
SIU 2019, Conference Paper (Full Text), February 2019
IEEE TRANSACTIONS ON SIGNAL PROCESSING, SCI Journal, February 2019

SIU 2019, Conference Paper (Full Text), February 2019
ICASSP 2019, Conference Paper (Full Text), January 2019
ICASSP 2019, Conference Paper (Full Text), January 2019
ICASSP 2019, Conference Paper (Full Text), January 2019
IEEE TRANSACTIONS ON SIGNAL PROCESSING, SCI Journal, September 2018
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, Journal Indexed in SCI-E, September 2018
ICASSP 2018, Conference Paper (Full Text), January 2018

Tasks In Event Organizations

Öktem S. F., 2022 Computational Optical Imaging and Sensing (COSI) Conference, Scientific Congress, Turkey, Temmuz 2022
Öktem S. F., 2021 OSA Computational Optical Imaging and Sensing (COSI) Conference, Scientific Congress, Canada, Temmuz 2021
Öktem S. F., 28th Signal Processing and Communication Applications (SIU) Conference, Scientific Congress, Turkey, Ekim 2020
Öktem S. F., 2020 OSA Computational Optical Imaging and Sensing (COSI) Meeting, Scientific Congress, Canada, Temmuz 2020
Öktem S. F., 2019 ICCV Workshop on Learning for Computational Imaging, Workshop Organization, Seoul, South Korea, Kasım 2019
Öktem S. F., 2019 OSA Computational Optical Imaging and Sensing (COSI) Meeting, Scientific Congress, Germany, Haziran 2019
Öktem S. F., 27th Signal Processing and Communications Applications (SIU) Conference, Scientific Congress, Sivas, Turkey, Nisan 2019
Öktem S. F., 25th Signal Processing and Communication Applications (SIU) conference, Scientific Congress, Turkey, Mayıs 2017
Öktem S. F., 41st COSPAR Scientific Assembly (cancelled due to 15 July), Scientific Congress, Turkey, Ağustos 2016

Metrics

Publication: 74
Citation (WoS): 187
Citation (Scopus): 335
H-Index (WoS): 7
H-Index (Scopus): 10

Congress and Symposium Activities

7th International Symposium on Multidisciplinary Studies and Innovative Technologies, Invited Speaker, Ankara, Turkey, 2023
21. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Invited Speaker, İstanbul, Turkey, 2019

Invited Talks

Degrees of freedom of optical systems and signals with applications to sampling and system simulation, Conference, Imaging Systems and Applications Meeting, OSA Imaging and Applied Optics Congress, United States Of America, June 2013