

Akhan Almagambetov
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Qualifications

Electrical and Computer Engineering, Ph.D., Toward computationally lightweight stationary and mobile computer vision-based traffic surveillance for assistive devices in intelligent transportation systems, Syracuse University

Aug 1 2008 → Aug 1 2013

Award Date: Aug 1 2013

Electrical Engineering, M.Sc., Reconfigurable FPGA-based bit-serial multipliers, Syracuse University

Aug 1 2008 → Jun 1 2011

Award Date: Jun 1 2011

Computer Engineering, B.Sc., SCADAville, Norwich University

Aug 15 2004 → May 15 2008

Award Date: May 15 2008

2006 → ... IEEE Senior Member, IEEE S.M.

Employment

Associate professor

Professor

Department of Electrical and Computer Engineering

School of Engineering and Digital Sciences

Dec 14 2020 → present

Associate professor

School of Engineering and Digital Sciences

Kazakhstan

Dec 14 2020 → present

Associate professor

Embry-Riddle Aeronautical University

United States

Mar 1 2020 → Dec 31 2020

Assistant professor

Embry-Riddle Aeronautical University

United States

May 1 2015 → Mar 1 2020

Assistant professor

Norwich University

United States

Jan 1 2015 → Jun 30 2015

Instructor

Norwich University

United States

Jul 1 2013 → Jan 1 2015

Research outputs

Performance of STAR-RIS-aided cooperative NOMA networks under Nakagami-m fading

Toregozhin, T., Shaikh, M. H. N., Almagambetov, A. & Nauryzbayev, G., Apr 1 2024, In: Ad Hoc Networks. 156, 103399.

Detection of loaded and unloaded UAV using deep neural network

Seidaliyeva, U., Alduraibi, M., Ilipbayeva, L. & Almagambetov, A., Nov 1 2020, *2020 Fourth IEEE International Conference on Robotic Computing (IRC)*. p. 490-494 5 p.

Multi-label UAV sound classification using Stacked Bidirectional LSTM

Utebayeva, D., Almagambetov, A., Alduraibi, M., Temirgaliyev, Y., Ilipbayeva, L. & Marxuly, S., Nov 1 2020, *2020 Fourth IEEE International Conference on Robotic Computing (IRC)*. p. 453-458 6 p.

Digital Circuit Design Laboratory Manual

Almagambetov, A., Pavlina, M. & Mukhortova, Y., Apr 5 2020, 5 ed. Prescott, Arizona: Lulu Press Inc. 238 p.

Digital Circuit Design Laboratory Manual

Almagambetov, A., Pavlina, M. & Mukhortova, Y., Sept 15 2019, 4 ed. Prescott, Arizona: Lulu Press Inc. 231 p.

Automatic detection by a wearable camera

Casares, M., Velipasalar, S. & Almagambetov, A., May 28 2019, IPC No. WO2013075002A1, US Patent Office, Patent No. US10306135B2, Feb 13 2017, Priority date Nov 18 2011, Priority No. US201161561594P

Bit-serial multiplier for FPGA applications

Almagambetov, A. & Ross, H., Apr 30 2019, US Patent Office, Patent No. US10275219B2, Nov 8 2017, Priority date Nov 8 2016, Priority No. US201662419245P

Digital Circuit Design Laboratory Manual

Almagambetov, A. & Pavlina, M., Mar 6 2019, 3 ed. Lulu Press Inc. 261 p.

Digital Circuit Design Laboratory Manual

Almagambetov, A. & Pavlina, M., Aug 12 2018, 2 ed. Prescott, Arizona: Lulu Press Inc. 228 p.

Digital Circuit Design Laboratory Manual

Almagambetov, A., Dec 15 2017, 1 ed. Prescott, Arizona: Embry-Riddle Aeronautical University. 197 p.

Cross-sectional study of engineering student performance across different types of first-year digital logic design laboratories

Almagambetov, A. & Pavlina, J. M., Aug 6 2017.

Cross-sectional study of engineering student performance across different types of first-year digital logic design laboratories

Almagambetov, A. & Pavlina, J. M., 2017, *ASEE First Year Eng. Ed. (FYEE) Conf.*.

Effect on Compliance with Required Learning Outcomes Through the Introduction of State-of-the-Art Technologies and Industry-Standard EDA Tools into the Digital Logic Design Laboratory Sequence

Almagambetov, A., Pavlina, M., Kempf, A., Olson, D. & Ross, H., 2016, *ASEE First Year Eng. Ed. (FYEE) Conf.*.

Integrating Research into Undergraduate Courses: Experiences from a Multi-Disciplinary Faculty Learning Community

Battaglia, D., Sampigethaya, K., Almagambetov, A., Andalibi, M., Groh, T., Martin, K., Pavlina, M., Siewert, S. & Boettcher, A., 2016, *ASEE Rocky Mtn. Sec. Conf.*.

Mobile Standards-Based Traffic Light Detection in Assistive Devices for Individuals with Color-Vision Deficiency

Almagambetov, A., Velipasalar, S. & Baitassova, A., Jun 1 2015, In: IEEE Transactions on Intelligent Transportation Systems. 16, 3, p. 1305-1320 16 p.

Robust and Computationally Lightweight Autonomous Tracking of Vehicle Taillights and Signal Detection by Embedded Smart Cameras

Almagambetov, A., Velipasalar, S. & Casares, M., Jun 1 2015, In: IEEE Transactions on Industrial Electronics. 62, 6, p. 3732-3741 10 p.

Autonomous tracking of vehicle taillights and alert signal detection by embedded smart cameras

Almagambetov, A. & Velipasalar, S., 2014, *Distributed Embedded Smart Cameras: Architectures, Design and Applications*. Bobda, C. & Velipasalar, S. (eds.). 1 ed. New York, New York: Springer Verlag, p. 121-150 29 p.

Toward computationally lightweight stationary and mobile computer vision-based traffic surveillance for assistive devices in intelligent transportation systems

Almagambetov, A., 2013, Syracuse, New York: Syracuse Univ. 231 p.

Automatic fall detection by a wearable embedded smart camera

Casares, M., Ozcan, K., Almagambetov, A. & Velipasalar, S., Oct 1 2012, *2012 Sixth International Conference on Distributed Smart Cameras (ICDSC)*. p. 1-6 6 p.

Autonomous tracking of vehicle taillights from a mobile platform using an embedded smart camera

Almagambetov, A., Casares, M. & Velipasalar, S., Oct 1 2012, *2012 Sixth International Conference on Distributed Smart Cameras (ICDSC)*. p. 1-6 6 p.

A Robust Algorithm for the Detection of Vehicle Turn Signals and Brake Lights

Casares, M., Almagambetov, A. & Velipasalar, S., Sept 1 2012, *2012 IEEE Ninth International Conference on Advanced Video and Signal-Based Surveillance*. p. 386-391 6 p.

Autonomous tracking of vehicle rear lights and detection of brakes and turn signals

Almagambetov, A., Casares, M. & Velipasalar, S., Jul 1 2012, *2012 IEEE Symposium on Computational Intelligence for Security and Defence Applications*. p. 1-7 7 p.