

Asif Salekin

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RESEARCH INTERESTS

Machine Learning, Deep Learning, Mobile Health, Internet of Things (IoT), Pervasive and Ubiquitous Computing, Sensor Data Analytics

EXPERIENCE

NOKIA BELL LABS | RESEARCH INTERN

BHAG Realization Lab

June 2018 - Aug 2018 | Murray hill, New Jersey, USA

BOSCH RESEARCH AND TECHNOLOGY CENTER | RESEARCH INTERN

Audio Analytics and Deep Learning

May 2017 - Oct 2017 | Palo Alto, California, USA

UNIVERSITY OF VIRGINIA | RESEARCH ASSISTANT

May 2014 - Present | Charlottesville, VA

PEER REVIEWED FULL PAPERS | PUBLISHED

A Real-Time Audio Monitoring Framework with Limited Data for Constrained Devices

The 15th International Conference on Distributed Computing in Sensor Systems (*DCOSS 2019*).

A. Salekin, S. Ghaffarzadegan, Z. Feng, and J. Stankovic

A Weakly Supervised Learning Framework For Detecting Social Anxiety And Depression

ACM Interactive, Mobile, Wearable, and Ubiquitous Technologies (IMWUT), Vol. 2, Issue. 2 (*Ubicomp 2018*).

A. Salekin, J. Eberle, J. Glenn, B. Teachman, J. Stankovic

Distant Emotion Recognition

ACM Interactive, Mobile, Wearable, and Ubiquitous Technologies (IMWUT), Vol. 1, Issue. 3 (*Ubicomp 2017*).

A. Salekin, Z. Chen, M. Ahmed, J. Lach, D. Spruijt-Metz, K. Haye, B. Bell, J. Stankovic

DAVE: Detecting Agitated Vocal Events

IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering technologies (CHASE), 2017.

A. Salekin, H. Wang, K. Williams, J. Stankovic

AsthmaGuide: An Asthma Monitoring and Advice Ecosystem

IEEE Wireless Health 2016. (*Nominated for best paper*)

Co-first authors (A. Salekin, H. Ra), H. Yoon, J. Kim, S. Nirjon, D. Stone, S. Kim, J. Lee, S. Son and J. Stankovic

Detection of Chronic Kidney Disease and Selecting Important Predictive Attributes

IEEE International Conference on Healthcare Informatics (ICHI), 2016.

A. Salekin, J. Stankovic

ARASID: Artificial Reverberation-Adjusted Indoor Speaker Identification Dealing with Variable Distances

International Conference on Embedded Wireless Systems and Networks (EWSN), 2019 (accepted).

Z. Chen, M. Ahmed, A. Salekin, J. Stankovic

EDUCATION

UNIVERSITY OF VIRGINIA

PHD, COMPUTER SCIENCE

Advisor: Professor John A. Stankovic

Expected April 2019

UNIVERSITY OF VIRGINIA

M.SC, COMPUTER SCIENCE

May 2016 | Cum. GPA: 3.98 / 4.0

AWARDS

Graduate Student Award for Outstanding Research

UVA Department of Computer Science, 2018.

Nominated for best paper award

AsthmaGuide: at Wireless health, 2016.

Selected for Third Annual Public Days Showcase Event

AsthmaGuide, was selected to represent the highest achievements of scholarship, research, and creative work from undergraduate and graduate students across UVA.

Student Travel Award

SenSys Student Grant, NSF, 2015, and Wireless Health Travel Grant, NIH, 2014.

PATENT

AudioEmergency: Audio Event Detection for Surveillance Systems (submitted)

A. Salekin, S. Ghaffarzadegan, Z. Feng

CONTRIBUTIONS TO FUNDED RESEARCH

NSF Smart and Connected Health grant 2018 (Award Number: 1838615)

Amount: \$1,200,000

DGIST Research and Development Program (CPS Global center) funded by the Ministry of Science, ICT and Future Planning, 2016

Amount: \$180,000

PEER REVIEWED FULL PAPERS | PUBLISHED

MOBI-COG: A Mobile Application for Instant Screening of Dementia Using the Mini-Cog Test

Wireless Health 2014.

S. Nirjon, I. Emi, A. Mondol, **A. Salekin**, and J. Stankovic

Extracting and Ranking Web Communities

International Conference on Web Intelligence, Mining and Semantics (WIMS), 2013.

A. Salekin, J. Tabassum, M. Hasan

A Novel Approach for Constructing Emulator for Microsoft Kinect XBOX 360 Sensor in the .NET Platform

International Conference on Intelligent Systems, Modelling and Simulation (ISMS), 2013.

MD. Rahman, S. Rahman, R. Hasan, R. Noel, **A. Salekin**, H. Ferdous

A Novel Clustering-Based Ensemble Classification Model for Block Learning

International Conference on Pattern Recognition Applications and Methods (ICPRAM), 2013.

MD. Rahman, MD. Rahman, **A. Salekin**, S.H. Chowdhury, S.A. Anik

A Novel Approach for Generating Clustered Based Ensemble of Classifiers

International Journal of Machine Learning and Computing, Vol. 3, Issue. 1, Page 137, 2013.

MD. Rahman, MD. Rahman, **A. Salekin**, A.S. Andalib

Composite Pattern Matching in Time Series

International Conference on Computer and Information Technology (ICCIT), 2012.

A. Salekin, M. Islam, MD. Rahman

Pattern matching in time series using combination of neural network and rule based approach

International Conference on Electrical and Computer Engineering (ICECE), 2012.

A. Salekin, MD. Rahman

Novel approaches for detecting fabric fault using artificial neural network with k-fold validation

International Conference on Computer and Information Technology (ICCIT), 2012.

A.S. Andalib, **A. Salekin**, M.R. Islam, M. Abdulla-Al-Shami

FULL PAPERS | IN SUBMISSION

Sensor Data Integration: A Multidimensional Constrained MIL approach.

anonymous submission.

SELECTED POSTERS AND DEMOS

Detecting Social Anxiety and Depression Symptoms from Features of Speech, **ABCT's 52nd Annual Convention, 2018.**

LifeMaps - An Automated Diary System Based on the Structure of Lives, **SenSys, 2016.**

Software architecture for efficiently designing cloud applications using node.js, **MobiSys, 2016.**

KinVocal: Detecting Agitated Vocal Events, **SenSys, 2015.**

AsthmaGuide: An Ecosystem for Asthma Monitoring and Advice, **SenSys, 2015.**

SKILLS

Programming language: Java, Python, C, C++, C#, Android development, Assembly Language (Intel 80x86, MIPS), UNIX shell scripting, SQL, LATEX, TEX

Deep learning & NLP: Tensorflow, keras, gensim, Apache OpenNLP, Natural language toolkit (NLTK)

Scientific Computing: Matlab, Octave, R
Internet of Things (IoT): Raspberry pi 3B, UP Board, MATRIX Creator, Sony SmartWatch, Myo Armband, Mycroft.ai

Web Programming: HTML, CSS, PHP, JSP, JavaScript, Ajax, JQuery

Database Management: System (RDBMS): Oracle, MySQL, JSON, MongoDB

Others: OpenGL, Verilog HDL, Quartus, Cisco Packet Tracer

INVITED TALKS

Industrial Research Labs

BHAG Realization Lab, Nokia Bell Labs, NJ, USA, 2018

ENSA Lab, Nokia Bell Labs, NJ, USA, 2018

Human Machine Interaction Lab (RTC 1.2),

BOSCH Research and Technology Center, CA, USA, 2017.

Conferences

Ubicomp 2017, IEEE CHASE 2017, Sensys 2016, IEEE Wireless Health 2016, IEEE ICHI 2016, Sensys 2015.

Workshop and Events

International Workshop on NEXT-GENERATION CYBER-PHYSICAL SYSTEMS 2018, The Public Days showcase event 2016, UVA Open House: 2014, 2015, 2016, 2017.

VOLUNTEERING

Student Volunteer: Wireless Health 2014, UVA Engineering Alumni Reunions 2014, Hosting Faculty Candidates (2015 & 2016), BUET CSE Festival (2008 & 2011), Bangladesh National Math Olympiad 2008

Co-founder and General Secretary: Association of Bangladeshi Students UVA, 2016-2017

Community Action: Mentored two underprivileged students in their studies, 2014-2016.

REFeree/REVIEWER

IMWUT (Ubicomp) 2017, 2018, 2019.

IFIP Performance 2018, DSN 2019, ISSRE 2018.