SAEED S. ALAHMARI

Najran University, Najran, KSA
+966596669553 ⋄ ssalahmari@nu.edu.sa ⋄ aalahmari.saeed@gmail.com

RESEARCH INTEREST

My research interests include Computer Vision, Machine Learning, Deep Learning, Medical Images Processing, and Stereology.

EDUCATION

University of South Florida, Tampa, FL, USA *2015 - 2020*
Ph.D in Computer Science
Department of Computer Science and Engineering
Dissertation title: "Active Deep Learning Method to Automate Unbiased Stereology Cell Counting"
Advisors: Prof. Dmitry Goldgof and Prof. Lawrence Hall
Committee: Prof. Dmitry goldgof, Prof. Lawrence O. Hall, Dr. Robert Gillies, Prof. Nasir Ghani, Prof. Sudeep Sarkar, and Prof. Peter R. Mouton

University of Dayton, Dayton, OH, USA *2013 - 2015*
Master degree of Computer Science.

King Khalid University, Abha, Saudi Arabia *2007 - 2011*
Bachelor degree of Computer Science. cum laude honor

WORK EXPERIENCE

Assistant Professor, Najran University, Najran, KSA *2020 - present*

Director of the Science and Engineering research center, Najran University, Najran, KSA *2021 - present*

Research Assistant, University of South Florida *2018 - 2020*
Supervisors: Prof. Dmitry Goldgof and Prof. Lawrence Hall
Worked on National Science Foundation (NSF) funded projects to build and evaluate deep learning models for automating unbiased stereology cell counting in stained microscopy images. Moreover, designed active deep learning-based method to leverage unlabeled data and studied deep learning model result's variations and reproducibility.

Research Internship, SRC Biosciences-Tampa, FL *Summer 2019*
Supervisor: Prof. Peter R. Mouton
Worked on building and deploying python-based annotation tool called: Video Disector Tool (VDT) for unbiased stereology microscopy images. Also, created modules using C++ to integrate Zeiss camera (SDK) to Stereology software to capture microscopic images.

Teacher Assistant, University of South Florida *2017 - 2018*
Courses: User-Level Linux Intro for IT, Analysis of Algorithms, and Program Design.
Role: Attended classes to help students with class activities, graded assignments and programming projects, proctored and graded exams, and mentored students weekly at CSE programming resources center.

Teacher Assistant, University of Dayton, Ohio *2014 - 2015*
Course: Data structures Role: Graded assignments and programming projects, and helped students on their programming projects during office hours.

HONORS AND AWARDS

- Academic Scholarship, Najran University - Saudi Arabia *2011 - 2020*
- Peer Review Certificate, European Radiology *2020*
- Research excellence honor, The Florida High Tech Corridor, Florida, USA *2019*
- Bachelor degree with Cum Laude honor, King Khalid University, Saudi Arabia *2011*

PUBLICATIONS

1. Palak Dave, **Saeed Alahmari**, Dmitry Goldgof, Lawrence O Hall, Hunter Morera, Peter R Mouto. (2021). An Adaptive Digital Stain Separation Method for Deep Learning-based Automatic Cell Profile Counts. Journal of Neuroscience Methods
2. **Alahmari, S. S.** Goldgof, D., Mouton, P. R, & Hall, L. O. (2020). Challenges for the Repeatability of Deep Learning Models. IEEE Access
3. **Alahmari, S. S.**, Goldgof, D., Hall, L. O., & Mouton, P. R. (2019, October). Automatic Cell Counting using Active Deep Learning and Unbiased Stereology. In 2019 IEEE International Conference on Systems, Man and Cybernetics (SMC) (pp. 1708-1713). IEEE.
4. Dave, P., Goldgof, D., Hall, L. O., **Alahmari, S.**, & Mouton, P. R. (2019). NOVEL STAIN SEPARATION METHOD FOR AUTOMATIC STEREOLOGY OF IMMUNOSTAINED TISSUE SECTIONS. Innovation in Aging, 3(Suppl 1), S256.
5. **Alahmari, S. S.**, Goldgof, D., Hall, L., Phoulady, H. A., Patel, R. H., & Mouton, P. R. (2019). Automated Cell Counts on Tissue Sections by Deep Learning and Unbiased Stereology.Journal of chemical neuroanatomy,96, 94-101.
6. **Alahmari, S. S.**, Cherezov, D., Goldgof, D. B., Hall, L. O., Gillies, R. J., & Schabath, M. B. (2018). Delta Radiomics Improves Pulmonary Nodule Malignancy Prediction in Lung Cancer Screening.IEEE Access,6, 77796-77806.
7. **Alahmari, S.**, Goldgof, D., Hall, L., Dave, P., Phoulady, H. A., & Mouton, P. (2018, December). Iterative Deep Learning Based Unbiased Stereology With Human-in-the-Loop. In2018 17th IEEE International Conference on Machine Learning and Applications (ICMLA)(pp. 665-670). IEEE.

PROFESSIONAL ACTIVITIES

Reviewer:

- Pattern CellPress Journal *2021*
- Quantitative Imaging in Medicine and Surgery *2020*
- International Conference on Pattren Recognition 2020, CAIHA workshop *2020*
- IEEE System, Man, and Cybernetics (SMC) *2020*
- IEEE access journal *2020*
- European Radiology Journal *2019,2020*
- International Conference of Machine Learning and Application *2019*
- International Symposium of Technology and Society *2019*
- Journal of Thoracic Disease *2019*

Delegated reviewer

- 25th International Conference on Pattern Recognition, with Prof. Lawrence Hall *2020*

- IEEE access journal, with Prof. Lawrence Hall *2020*
- International Conference of Machine Learning, Prof. Lawrence Hall *2018*

Member of Conference Program Committee:

- First Workshop on Artificial & Affective Intelligence in Healthcare Applications for Vulnerable Population ICPR2020 *2020*
- International Conference of Machine Learning and Application *2019*
- International Symposium of Technology and Society *2019*

Volunteering in Organizing Events:

- 10th IEEE International Conference on Biometrics: Theory, Applications and Systems (BTAS), Tampa-FL *2019*

Grants:

- NIH *Awarded 12/2021*
  Role: Consultant
- Institutional Funding-Ministry of Education-KSA (total of SR 75,000) *Received 01/2021*
  Role: PI
- NSF STTR Phase 2 Grant *Received 01/2019*
  with Prof. Mouton, Prof. Hall, and Prof. Goldgof
  Role: Student
- Nvidia Computing Equipment Grant *Received 08/2018*
  with Hunter Morera, Chih-Yun Pai, and Prof. Goldgof
  Role: Student
- NSF STTR Phase 1 Grant *Received 02/2018*
  with Prof. Mouton, Prof. Hall, and Prof. Goldgof

Professional Development:

- Preparing for College Teaching course *Spring 2020*
- Teaching Assistant Training *Fall 2017*

TECHNICAL STRENGTHS

Programming Languages	C, C++, Python, Swift, PHP, Matlab
Markup languages	Latex, HTML
Operating Systems	Windows, Linux, Apple MacOS
API and Platforms	Tensorflow, Keras,Scikit-learn, OpenCV, Pytorch
Others	Weka, Stereology

REFERENCES

Dmitry Goldgof, Distinguished Professor and Vice Chair
Department of Computer Science and Engineering
University of South Florida
(813)974-4055, goldgof@mail.usf.edu

Lawerence Hall, Distinguished Professor
Department of Computer Science and Engineering
University of South Florida
(813)974-4195, lohall@mail.usf.edu

Peter R. Mouton, Professor
Department of Computer Science and Engineering
University of South Florida
peter@disector.com, pmouton@health.usf.edu

Matthew B. Schabath, Ph.D.
Departments of Cancer Epidemiology and Thoracic Oncology
Moffitt Cancer Center
Matthew.Schabath@moffitt.org