

# TAWFIQ SALEM

<https://tsalem.github.io/>

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## Education

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| 2014–2019 | <b>University of Kentucky</b> Lexington, KY<br>Ph.D. in Computer Science (GPA: 4.0).                                   |
| 2010–2012 | <b>Purdue University</b> Indianapolis, IN<br>Master of Science in Computer Science (GPA: 3.73).                        |
| 2002–2006 | <b>Islamic University</b> Gaza, Palestine<br>Bachelor of Science in Computer Science (GPA: 3.8, 1 <sup>st</sup> rank). |

## Experience

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| 2020–Present | <b>Purdue University</b> , Computer and Information Technology Department– West Lafayette, IN<br><i>Visiting Assistant Professor:</i><br>Fall 2020 : Software Development Concepts (Python)<br>Fall 2020 : C Programming  |
| 2019–2020    | <b>Miami University</b> , Computer Science and Software Engineering Department–Oxford, OH<br><i>Visiting Assistant Professor:</i><br>Fall 2019 : CSE-102, Introduction to Computing and Engineering<br>Spring 2020 : CSE-271, Object-Oriented Programming                         |
| 2015–2019    | <b>University of Kentucky</b> , Computer Science Department – Lexington, KY<br><i>Research Assistant:</i><br>In Dr. Nathan Jacobs research group, working in the area of Computer Vision.   |
| 2014–2017    | <b>University of Kentucky</b> , Computer Science Department – Lexington, KY<br><i>Teaching Assistant:</i><br>Teaching assistant for CS 221 (MATLAB), CS 215 (C++), and CS 115 (Python).   |
| Summer       | <b>University of Kentucky</b> , Computer Science Department – Lexington, KY<br><i>Summer Instructor:</i><br>Summer 2016- Teaching CS 115: Introductions to Computer Programming (Python)<br>Summer 2014- Teaching CS 221: First Course in Computer Science for Engineers (Matlab) |
| 2010–2012    | <b>Purdue University</b> , Computer Science Department – Indianapolis, IN<br><i>Tutor:</i><br>Assisted undergraduate students in programming problems (C,C++, Java, Python, R).<br>Helped undergraduate students in database (Oracle, MySQL).                                     |
| 2008–2010    | <b>University College of Applied Science</b> – Gaza, Palestine<br><i>Instructor:</i><br>Teaching Introductions to Computer Programming(C++)   |
| 2006–2010    | <b>Islamic University</b> – Gaza, Palestine<br><i>Teaching Assistant and Lab Technician:</i><br>Teaching assistant for computer science courses.<br>Maintained the computer labs: installing operating systems and software packages.   |

## Honors and Awards

2017	ACM UK Award for Outstanding Teaching Assistant in CS, University of Kentucky.
2016	CS Department Award for Outstanding Teaching Assistant, University of Kentucky.
2016	\$1,000 Computer Science Department Travel Grant, University of Kentucky.
2016	\$400 Graduate School Travel Grant, University of Kentucky.
2010-2012	Fulbright scholarship, U.S. Department of State.
2010-2011	\$5,000 grant from computer science department, Purdue University, Indianapolis.
2006	Graduated with the highest grade point average (3.8, 1 <sup>st</sup> rank) among the students of the Faculty of Information Technology, Islamic University - Gaza (Class of 2006).

## Publications

### Published/Accepted

2021	Rafael Padilha, <b>Tawfiq Salem</b> , Scott Workman, Scott Workman, Fernanda A Andal, Anderson Rocha, Nathan Jacobs. <i>Content-Based Detection of Temporal Metadata Manipulation</i> . In: <i>arXiv:2103.04736</i> .
2020	<b>Tawfiq Salem</b> , Scott Workman, Nathan Jacobs. <i>Learning a Dynamic Map of Visual Appearance</i> . In: IEEE Computer Vision and Pattern Recognition (CVPR).
2019	<b>Tawfiq Salem</b> , Connor Greenwell, Hunter Blanton, Nathan Jacobs. <i>Learning to Map Nearly Anything</i> . In IEEE International Geoscience and Remote Sensing Symposium (IGARSS). [Oral]
2019	Weilian Song, <b>Tawfiq Salem</b> , Hunter Blanton, Nathan Jacobs. <i>Remote Estimation of Free-Flow Speeds</i> . In IEEE International Geoscience and Remote Sensing Symposium (IGARSS). [Oral]
2019	Yu Zhang, Gongbo Liang, <b>Tawfiq Salem</b> , Nathan Jacobs. <i>Defense-PointNet: Protecting PointNet Against Adversarial Attacks</i> . In IEEE Big Data Workshops [The Next Frontier of Big Data From LiDAR Workshop]
2019	Gongbo Liang, Xiaoqin Wang, Yu Zhang, Xin Xing, Hunter Blanton, <b>Tawfiq Salem</b> , Nathan Jacobs. <i>Joint 2D-3D Breast Cancer Classification</i> . In IEEE International Conference on Bioinformatics and Biomedicine (BIBM) [Oral]
2018	<b>Tawfiq Salem</b> , Menghua Zhai, Scott Workman, Nathan Jacobs. <i>A Multimodal Approach to Mapping Soundscapes</i> . In IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPR). [Sight and Sound Workshop]
2018	Menghua Zhai, <b>Tawfiq Salem</b> , Connor Greenwell, Scott Workman, Robert Pless, Nathan Jacobs. <i>Learning Geo-Temporal Image Features</i> . In British Machine Vision Conference (BMVC).
2018	<b>Tawfiq Salem</b> , Menghua Zhai, Scott Workman, Nathan Jacobs. <i>A Multimodal Approach to Mapping Soundscapes</i> . In IEEE International Geoscience and Remote Sensing Symposium (IGARSS).
2017	William Song, <b>Tawfiq Salem</b> , Nathan Jacobs, Michael Johnson. <i>Detecting the Presence of Bird Vocalizations in Audio Segments Using a Convolutional Neural Network Architecture</i> . In International Symposium on Acoustic Communication by Animals. [Abstract]
2016	<b>Tawfiq Salem</b> , Scott Workman, Menghua Zhai, Nathan Jacobs. <i>Analyzing Human Appearance as a Cue for Dating Images</i> . In IEEE Winter Conference on Applications of Computer Vision (WACV).

## Talks and Presentations

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| 2018 | "A Multimodal Approach to Mapping Soundscapes", June. 2018, Sight and Sound Workshop at IEEE Conference on Computer Vision and Pattern Recognition, Salt Lake City, Utah. |
| 2015 | "Computer Vision Applications of Deep Convolutional Neural Networks", Nov. 2015, Keeping Current Seminar, Computer Science Department, University of Kentucky.            |
| 2016 | "Analyzing Human Appearance as a Cue for Dating Images", Mar. 2016, IEEE Winter Conference on Applications of Computer Vision, Lake Placid, NY.                           |

## Services and Affiliations

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| <b>Volunteer</b> | <ul style="list-style-type: none"><li>– Serving as Microteach Leader, Graduate School, University of Kentucky (2018).</li><li>– Engineers Day (E-Day), University of Kentucky (2016).</li></ul> |
| <b>Member</b>    | <ul style="list-style-type: none"><li>– Institute of Electrical and Electronics Engineers (IEEE).</li><li>– Association for Computing Machinery (ACM).</li></ul>                                |