Ehab A. ALBADAWY

ehalbadawy93@gmail.com

EDUCATION

FALL 2017- SPRING 2022	* PhD in ELECTRICAL AND COMPUTER ENGINEERING **University at Albany, SUNY**, U.S.
FALL 2011- SPRING 2016	* Bachelor of Engineering in COMPUTER ENGINEERING **Ain Shams University**, Egypt

WORK EXPERIENCE

JUN 2022 - PRESENT | META, Menlo Park, CA
Applied Research Scientist

* Working with Text-to-Speech (TTS) team on developing deep learning models to improve TTS quality and performance

SEPT 2021 - JAN 2022 | AMAZON, Seattle, WA
Applied Scientist Intern

* Worked with AWS speech science team on developing deep learning models for Automatic Speaker Recognition (ASR) Problem.

MAY-AUG 2021 | FACEBOOK, Menlo Park, CA
Research Intern (FAIAR)

* Worked with AI speech team on creating a public benchmark for vocoder quality and speed.

* Designed subjective and objective evaluation metrics to compare and evaluate seven different vocoders performance against each other.

JUN-AUG 2020 | FACEBOOK, Seattle, WA
Software Engineer Intern

* Worked with Pages Integrity Bad Actor team on analyzing, comparing, and building high precision detection algorithms for identifying violating Pages.

* By the end of the internship I reported the performance of different algorithms while successfully deploying one of them into production.

JUL-SEPT 2016 | VALEO, Egypt
Algorithms Development Engineer Intern

* Worked with systems and functions team on developing an end-to-end object tracking model using RNNs & Torch.

* Optimized the existing code and managed to get a good estimation of the entire environment state at the output including occluded objects.

RESEARCH EXPERIENCE

Aug 2017-
May 2022 | **Graduate Research Assistant**, Electrical and Computer Engineering, University at Albany, SUNY
Working on research projects related to media forensics, audio synthesis, and
speech signal analysis.

Nov 2016-
Mar 2017 | **Visiting Research Scholar** at RAILabs, Department of Radiology, Duke University
Worked on research projects with focus on brain tumor and breast cancer segmentation
in deep learning.

Fall 2015-
Spring 2016 | **Graduation Project Thesis**, Computer Engineering Department, Ain Shams University
* Developed a system for detecting abandoned objects in crowded scenes (slides)
* Worked on the action recognition problem with deep-learning approach using CNNs | pdf, video

Technical Skills

Strong/Very Good Experience:	Python, MATLAB; PyTorch, TensorFlow; LINUX CLI, Git, Vim
Good Experience:	Lua, C++, Java, JavaScript; JQuery, AJAX, RoR, Jekyll, HTML, CSS

Publications

* **Ehab A. AlBadawy**, Andrew Gibiansky, Qing He, Jilong Wu, Ming-Ching Chang, Siwei Lyu
  "Vocbench: A neural vocoder benchmark for speech synthesis", ICASSP 2022.

* **Ehab A. AlBadawy**, Siwei Lyu "Voice Conversion Using Speech-to-Speech Neuro-Style Transfer",
  Proceedings of Interspeech 2020.

* Mateusz Buda, **Ehab A. AlBadawy**, Ashirbani Saha, Maciej A Mazurowski "Deep Radiogenomics of
  Lower-Grade Gliomas: Convolutional Neural Networks Predict Tumor Genomic Subtypes Using
  MR Images", Radiology: Artificial Intelligence 2020.

* **Ehab A. AlBadawy**, Siwei Lyu, Hany Farid "Detecting AI-Synthesized Speech Using Bispectral Analysis",
  Proceedings of the IEEE Conference on CVPR Workshops 2019.

* Zhe Zhu, **Ehab A. AlBadawy**, Ashirbani Saha, Jun Zhang, Michael R Harowicz, Maciej A. Mazurowski
  "Deep Learning for identifying radiogenomic associations in breast cancer",
  Computers in biology and medicine 2019.

* **Ehab A. AlBadawy**, Yelin Kim, "Joint Discrete and Continuous Emotion Prediction Using Ensemble
  and End-To-End Approaches", ACM ICMI 2018.

* **Ehab A. AlBadawy**, Ashirbani Saha, Maciej A. Mazurowski, "Deep learning for segmentation of brain
  tumors: Impact of cross-institutional training and testing", Medical Physics 2018.

* Zhe Zhu, **Ehab AlBadawy**, Ashirbani Saha, Jun Zhang, Michael Harowicz, Maciej A. Mazurowski, "Breast
  cancer molecular subtype classification using deep features: preliminary results", SPIE 2018.