JUSTIN WANG

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EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN EXPECTED : MAY 2023
Bachelor of Science in Computer Science

- **Proficient Languages:** Python (Pytorch), Java, MATLAB, C++
- **Mathematics:** Discrete Structures, Differential Equations, Abstract Linear Algebra

EXPERIENCES

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY JUNE. 2019 – CURRENT
Reviewer – Transactions of Civil Engineering

- Acted as reviewer of two (and counting) papers on applied computer vision

TSINGHUA LABORATORY OF BRAIN AND INTELLIGENCE JUNE. 2019 – AUG. 2019
Researcher – Dept. Computer Science *Haidian, Beijing, China*

- Researched brain-inspired computing and neurologic processes through unsupervised learning
- Worked on computational biology in NLP using sparse convolutional autoencoders for feature extraction (*PyTorch*)
- Programmed hierarchical encoding and decoding of phonemes to mimic brain decomposition of language in neuron clusters

FLORIDA ATLANTIC UNIVERSITY JUNE. 2018 – MAY. 2019
Researcher – Dept. Computer Science *Boca Raton, Florida, USA*

- Worked with deep neural networks and machine learning, applying CNNs, LSTMs, FFNs, SVMs, and KNNs (*MATLAB*)
- Led focused oceanography project on forecasting satellite data through statistical data analysis (PCA) and LSTM regression in the Gulf of Mexico

MAJOR PUBLICATIONS

- **Wang, J. L.**, Zhuang, H., Ibrahim, A. K., Cherubin, L., and Ali, A. M., "Medium-Term Forecasting of Loop Current eddy Cameron and eddy Darwin formation in the Gulf of Mexico with a Divide-and-Conquer Machine Learning Approach," *Journal of Geophysical Research: Oceans*, 2019

- **Wang, J. L.**, Li, A. Y., Huang, M., Ibrahim, A. K., Zhuang, H., and Ali, A. M., "Classification of White Blood Cells with PatternNet-fused Ensemble of Convolutional Neural Networks (PECNN)," *Proc. IEEE International Sym. on Signal Processing and Information Technology*, 2018

- **Wang, J. L.**, Ibrahim, A. K., Zhuang, H., Ali, A. M., and Li, A. Y., "A Study on Automatic Detection of IDC Breast Cancer with Convolutional Neural Networks," *Proc. IEEE International Conf. on Computational Science and Computational Intelligence*, 2018