# Impact Of 2022
Xia Jiang, Associate Professor

- Developed the iMedBot, a web-based intelligent agent, currently hosted by *the Amazon Web Services (AWS)*. http://imedbot.odpac.net/

- Developed the MBIL-py package for learning direct and interactive risk factors and delivered it to the python community for public use [1]. https://pypi.org/project/mbil-py/

- It is import to control overfitting in deep learning and machine learning. We studied the correlation of each of the hyperparameters with overfitting and also looked into how the pairwise combination of these hyperparameters can affect overfitting.

- Developed the *deep feedforward neural network (DFNN)* programs, and the DFNN-LSM5, DFNN-LSM10 and DFNN-LSM15 models, we which we can conduct personalized prediction as to how likely breast cancer will metastasize within 5, 10, and 15-years of the initial treatment [2].
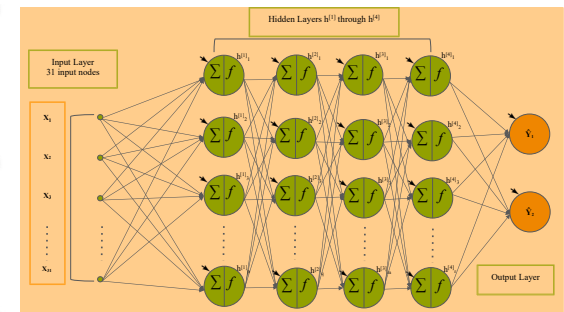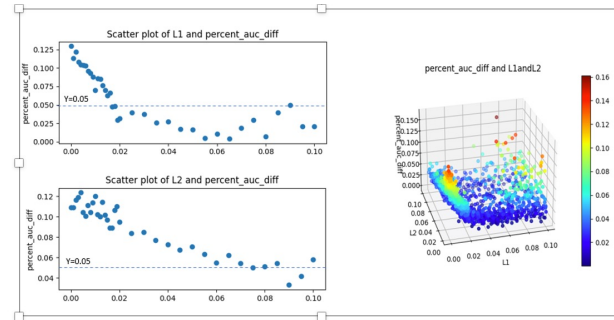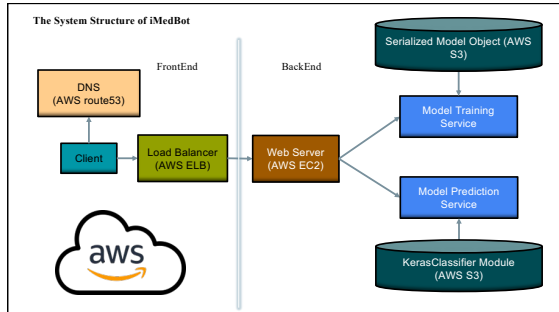
1. Gomez Marti JL, Brufsky A, Wells A, Jiang X. Machine Learning of Discern Interactive Clusters of Risk Factor for Late Recurrence of Metastatic Breast Cancer. *Cancers (Basel)*. 2022 Jan 5;14(1):253. PMID: 35008417 PMCID: PMC8750735 (*impact factor: 6.639*)
2. Jiang X; Xu C. Deep Learning and Machine Learning with Grid Search to Predict Later Occurrence of Breast Cancer Metastasis Using Clinical Data. Journal of Clinical Medicine. 2022, 11, 5772. https://doi.org/10.3390/jcm11195772 (*impact factor: 4.964*)

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