Study of Classification Uncertainty for Web Service Classification

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Summary

- Need to automate task of web service classification by using machine learning models
- Will help in improve discoverability of API’s thus improving reusability of code
- Models which take into account the uncertainty of the prediction have shown to have high accuracy and have added benefit of reserving judgement
Milestone 1 Progress

- Literature survey has been completed.
- Basic Models have been set up and preliminary results have been obtained for a small sample.
Milestone 2 Goals

- Retrain with Web Service Word Corpus for GloVe
- Try to improve dataset by web crawling etc (using information present in github, source code etc)
- Modify architecture of model
- Conduct experiments and document results for the same
Milestone 2 Progress

- Retraining with Web Service dataset corpus done for GloVe
- Feature extraction from web crawling in progress, need to see how useful it is
- Combined the evidential learning loss function with the ServeNet architecture and using newly training GloVe embedding layer
- Results and experiments in progress
Future Work

- Finish Results and experiments
- Try out the newly extracted features from github etc
- Documentation including paper and poster
Thanks