Relative Position Feature Extraction and Multi-classifier Combination based Tennis Action Recognition

修士課程卒業　馬子涵

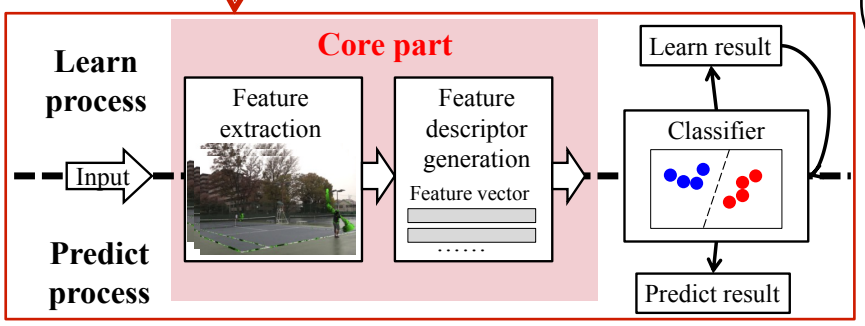
Background

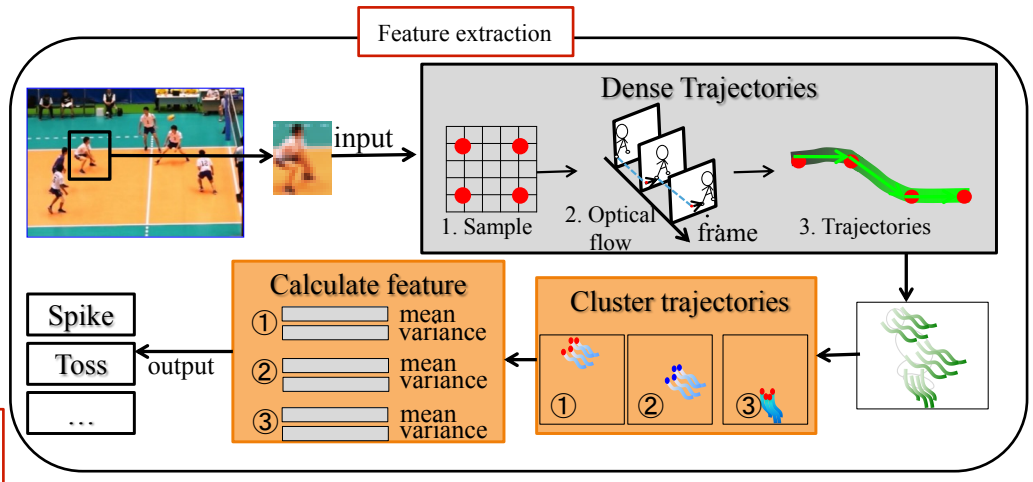
- Game tactics
- Player evaluation
- Score statistics

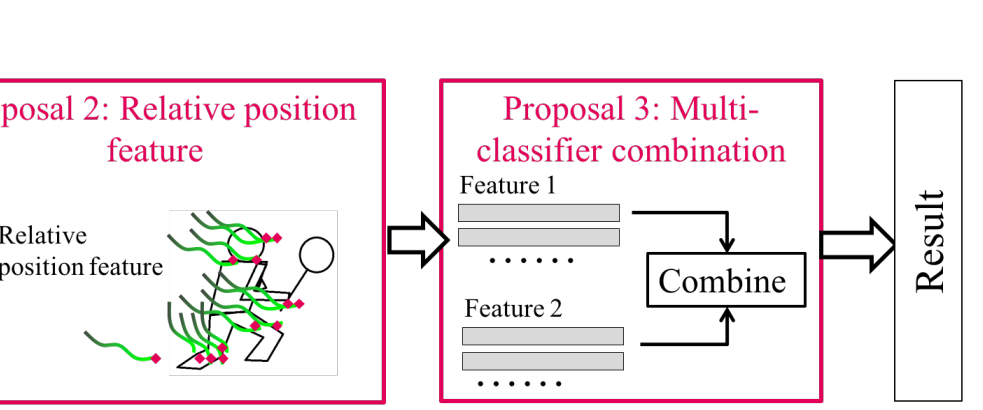
Software

Action recognition

Database



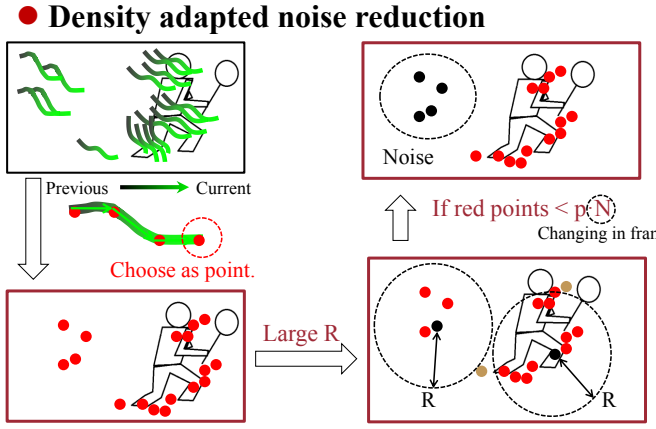




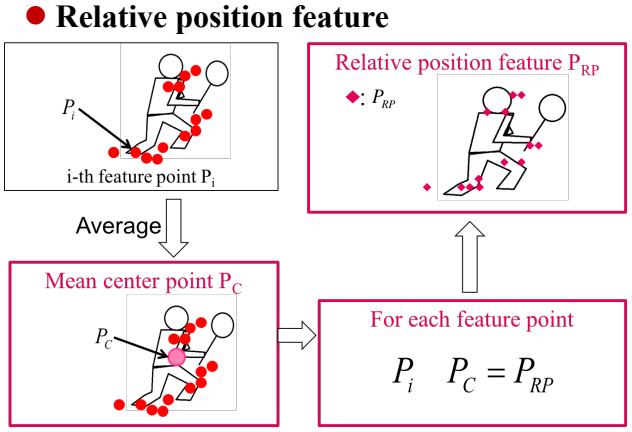
Proposal

Framework

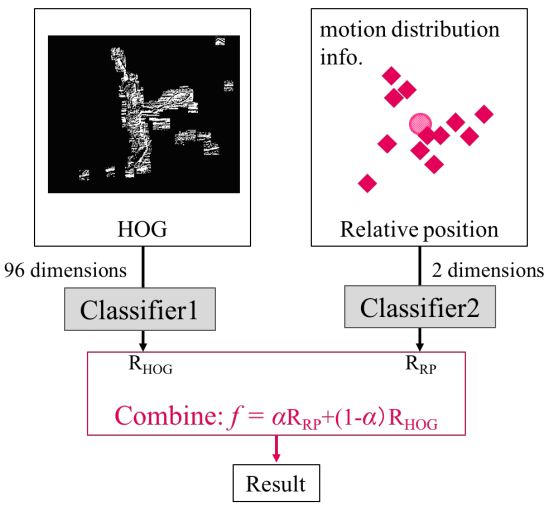
Density adapted noise reduction



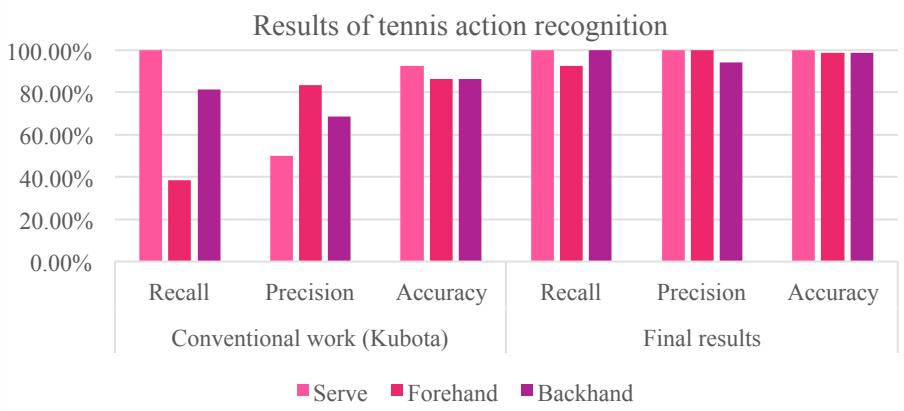
Relative position feature

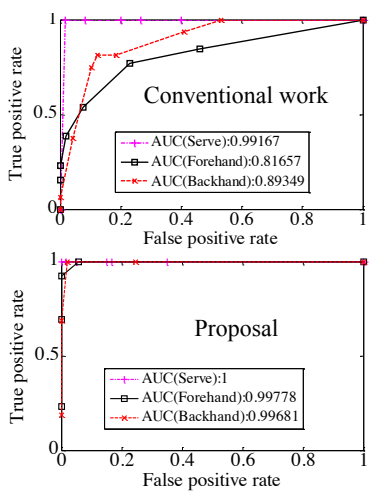


Multi-classifier combination



Experiment





Conclusion

Our research uses three proposals and finally reaches a success rate of tennis action recognition all above 98%, comparing with 89% average success rate of the conventional work.

Publication

Zihan Ma, Shuyi Huang, Masaaki Honda, Takeshi Ikenaga, "Relative Position Feature based Dense Trajectories with Density Adapted Noise Reduction for Tennis Player Action Recognition", *International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2016)*, July 2016.

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