

로봇공학응용

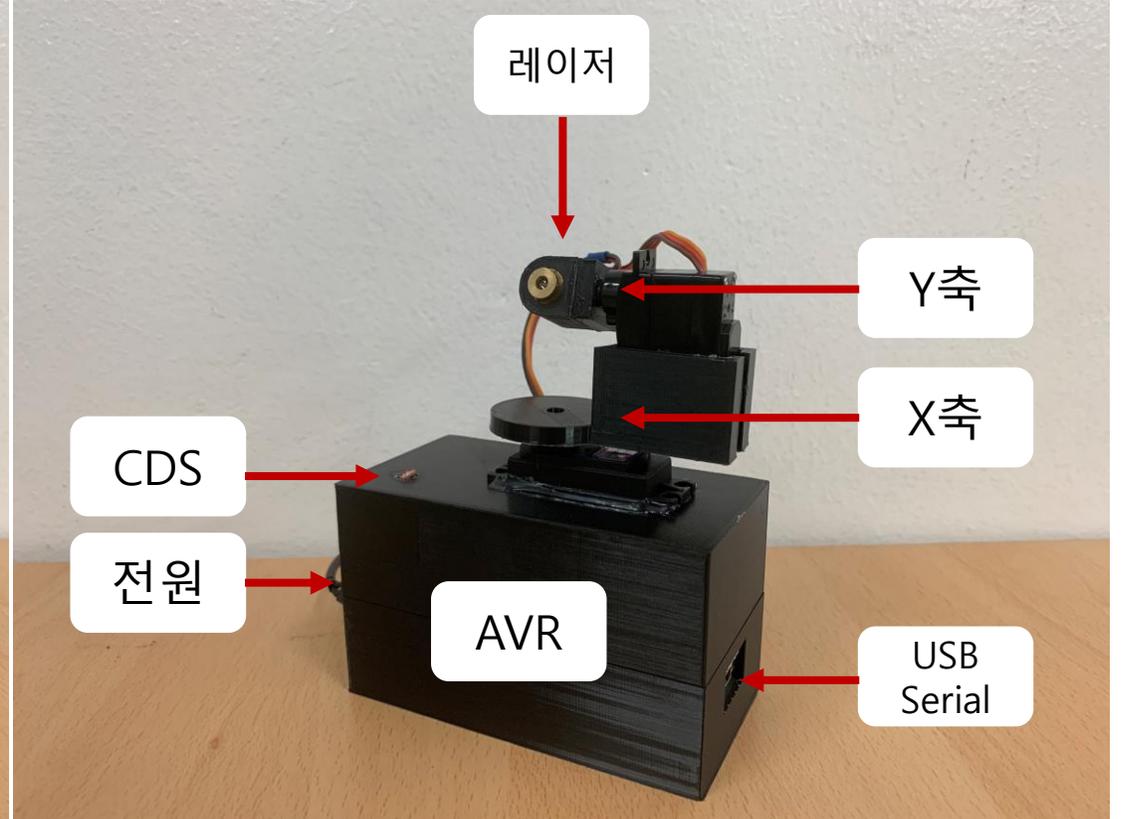
Visual Servoing System

1558012 박창순
1558016 연욱모

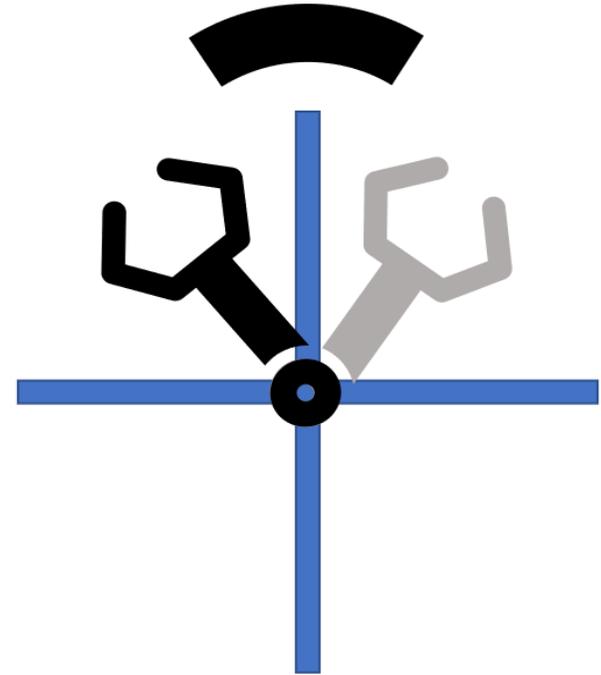
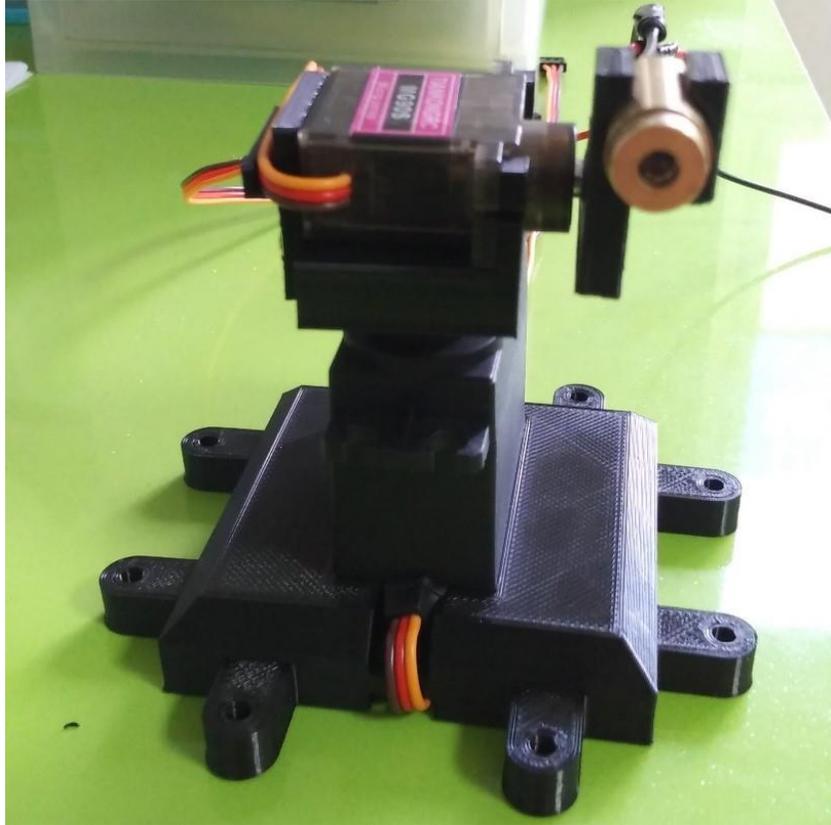
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- 작품소개
- 문제점 및 개선사항
- 시연영상
- Q & A

작품소개

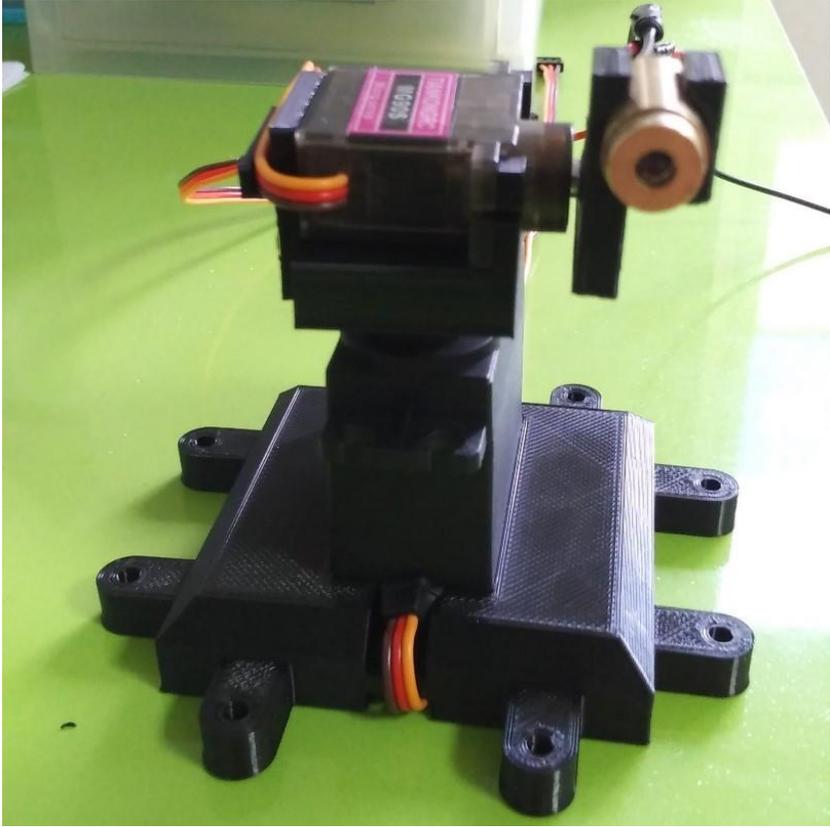


H/W 문제점 및 개선



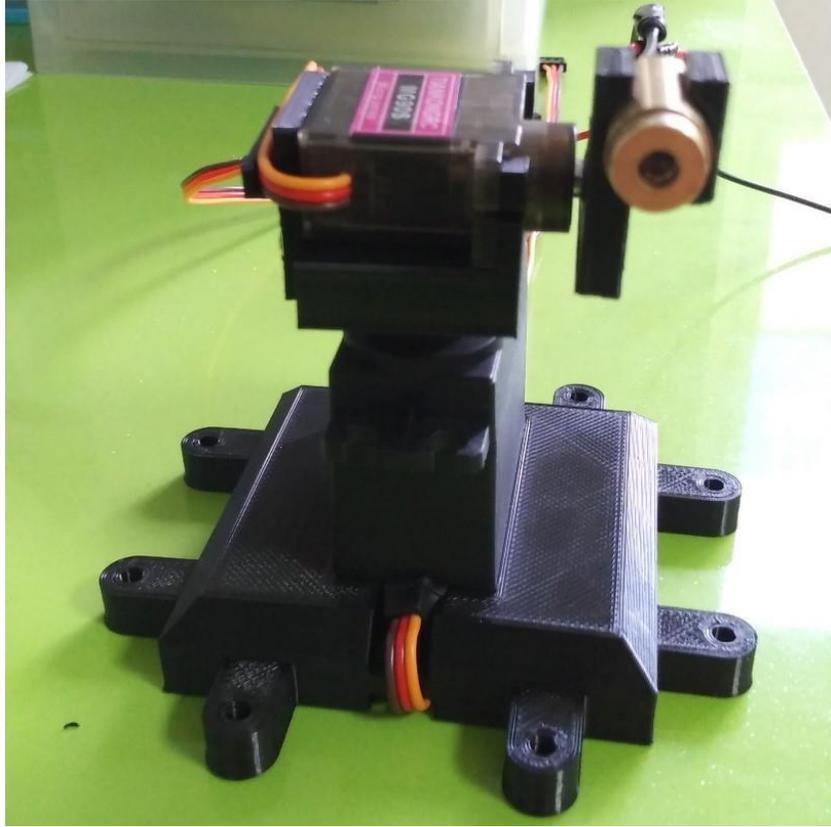
기존 구조는 팬틸트 X, 각도의 제한적

H/W 문제점 및 개선



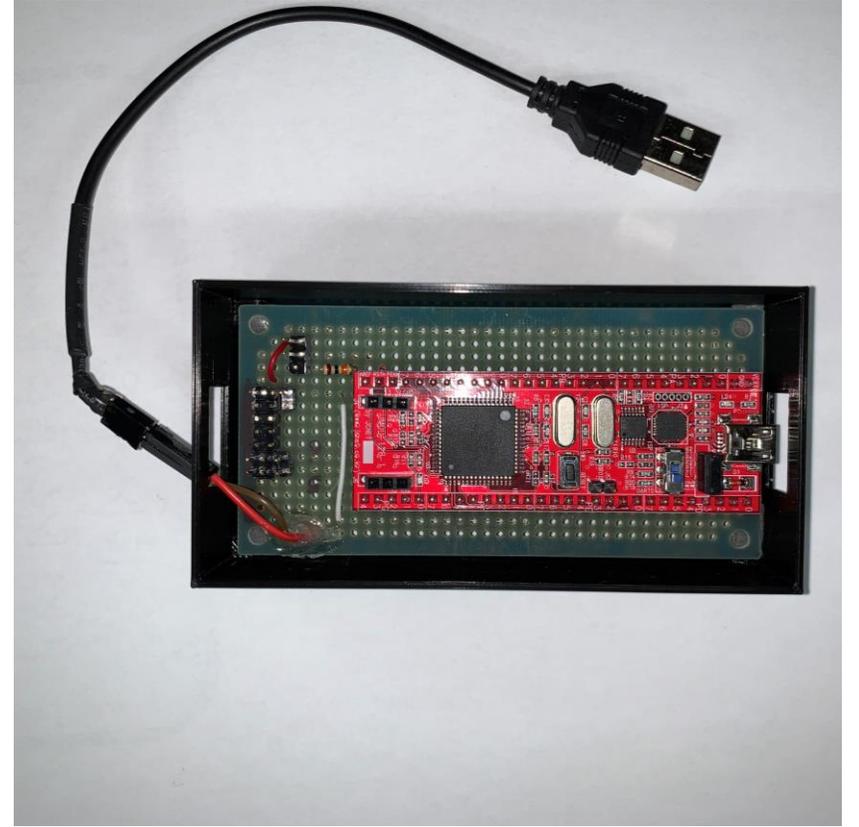
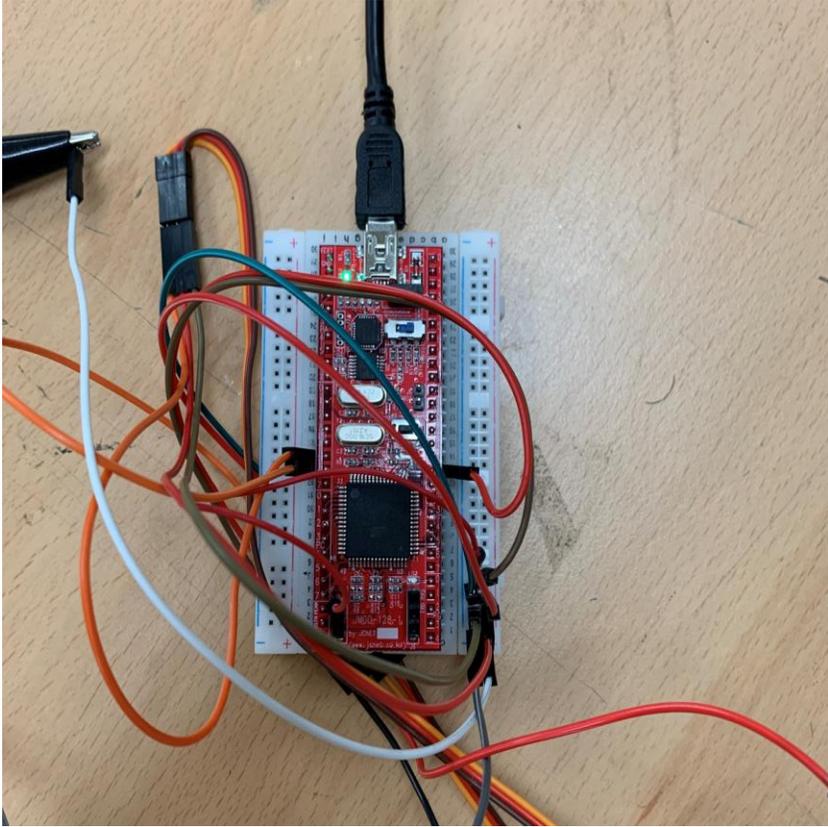
기존 구조에서 팬틸트 방식을 최대한 구현

H/W 문제점 및 개선



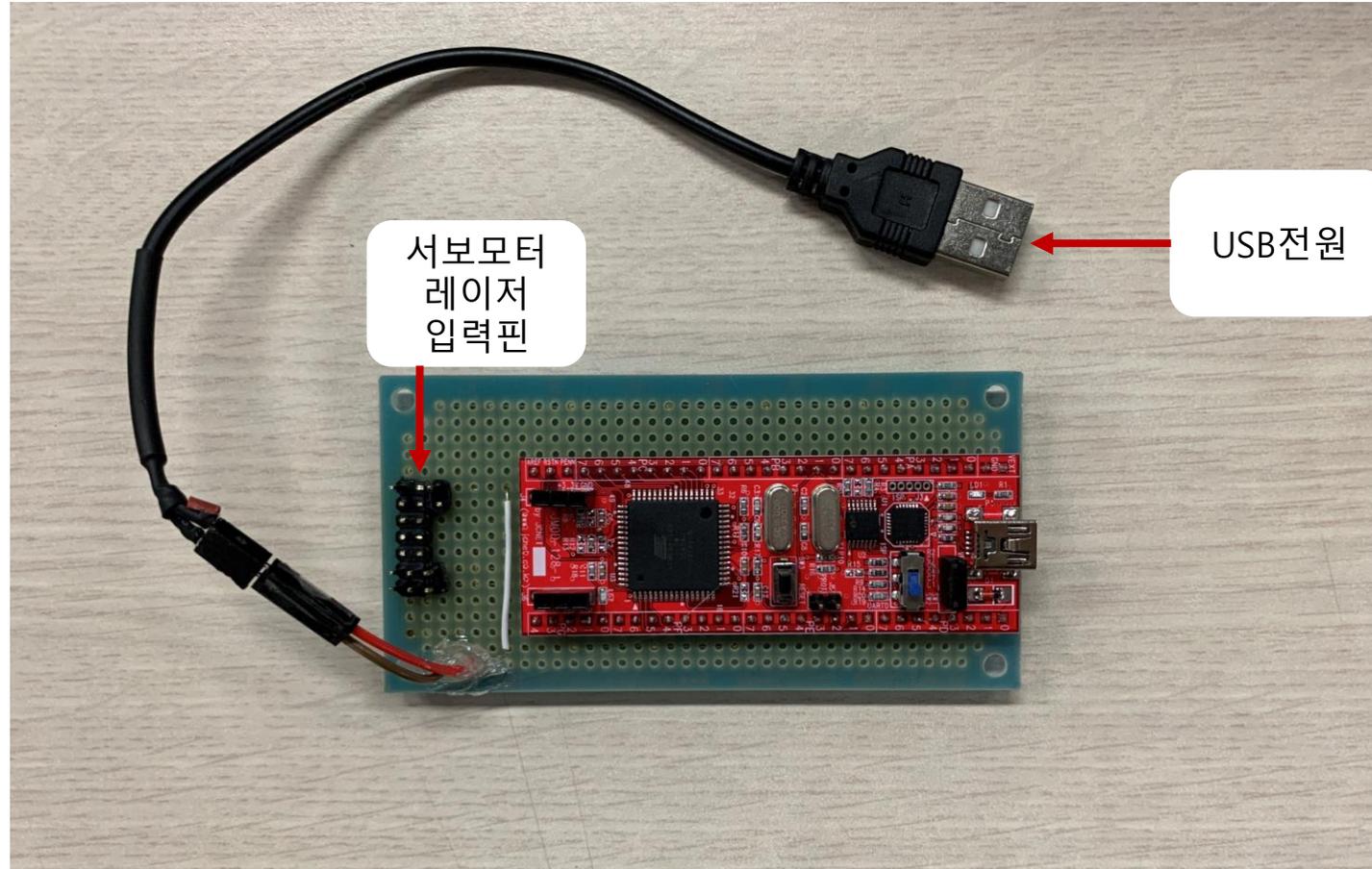
팬틸트 구현 및 하드웨어 개선

H/W 문제점 및 개선

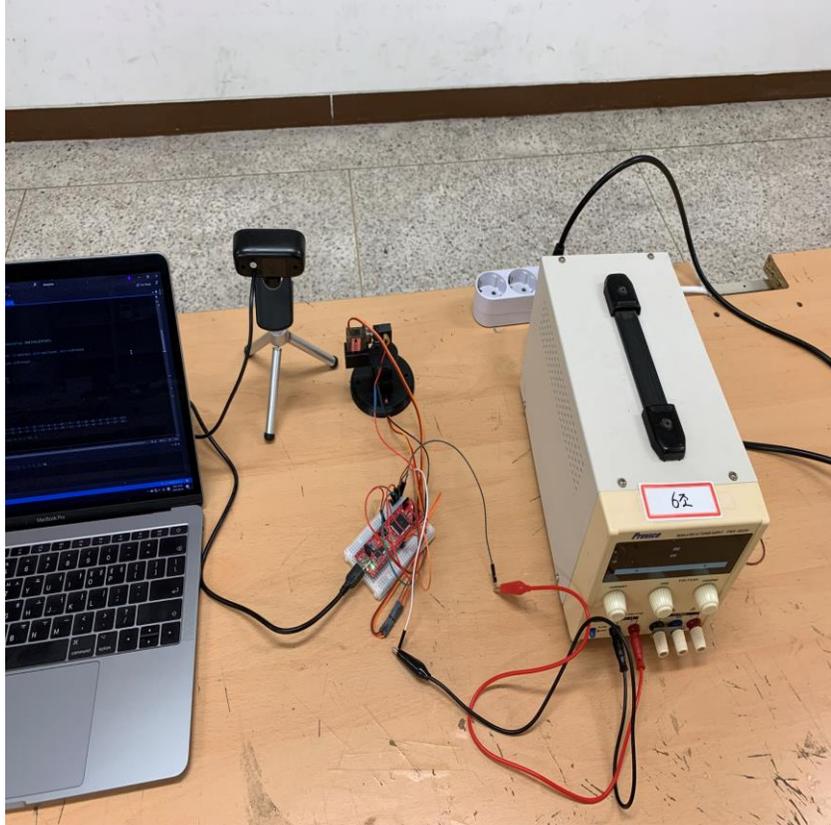


브레드보드 핀 접점불량 최소화

H/W 문제점 및 개선

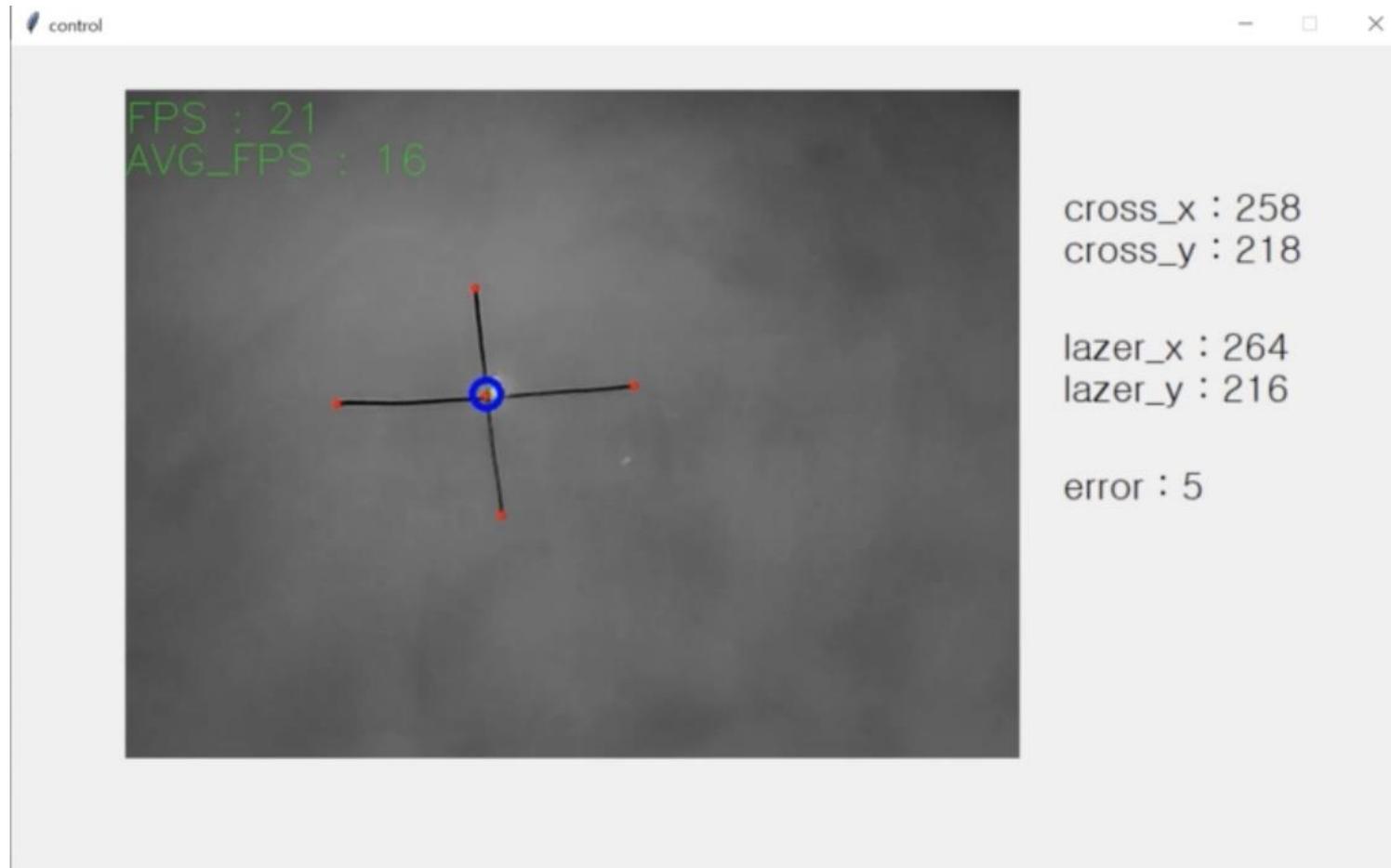


H/W 문제점 및 개선

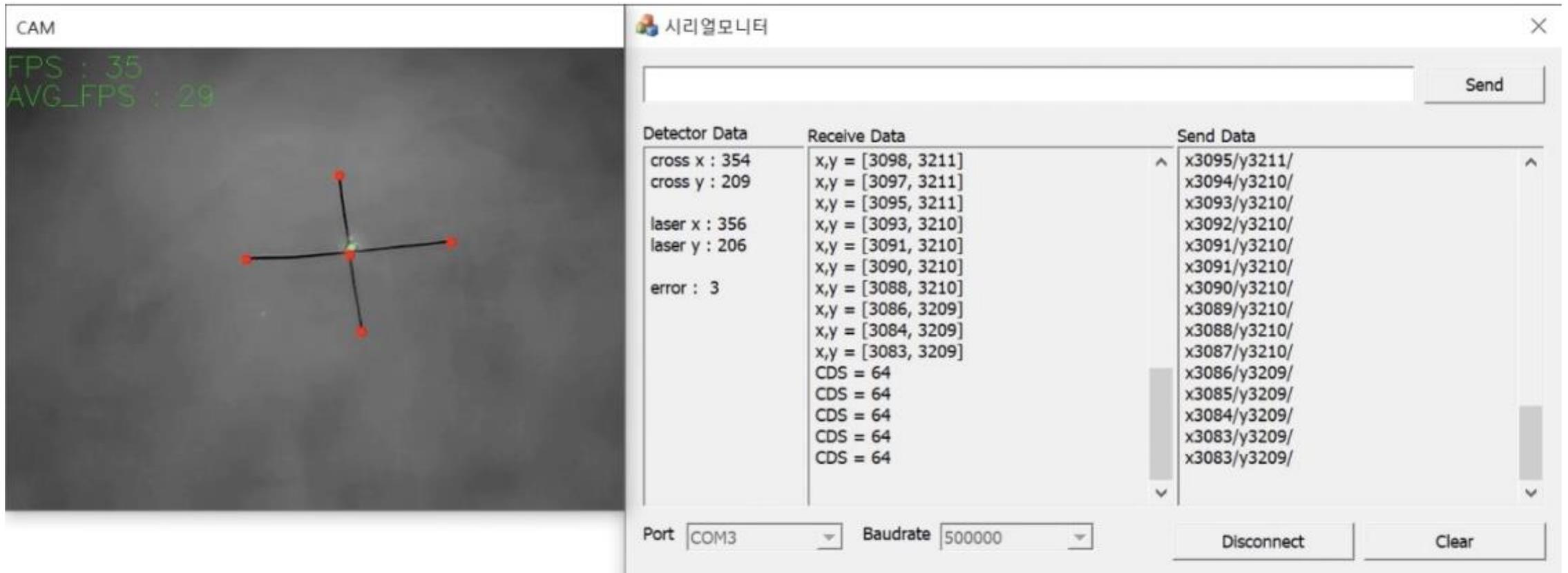


브레드보드와 파워서플라이 사용으로 인한 테스트 환경 개선

GUI변경_Python

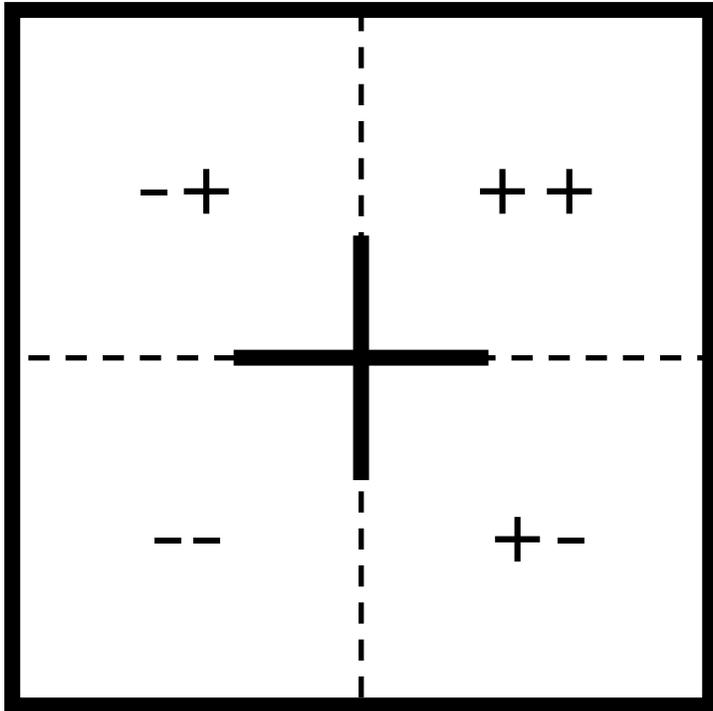


GUI변경_C++

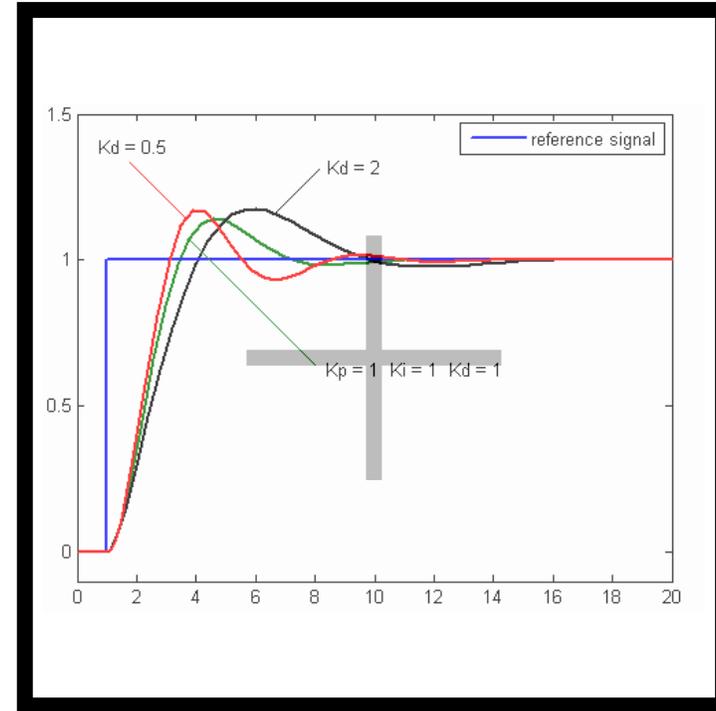


시리얼통신 및 데이터 모니터링 추가

PID추가

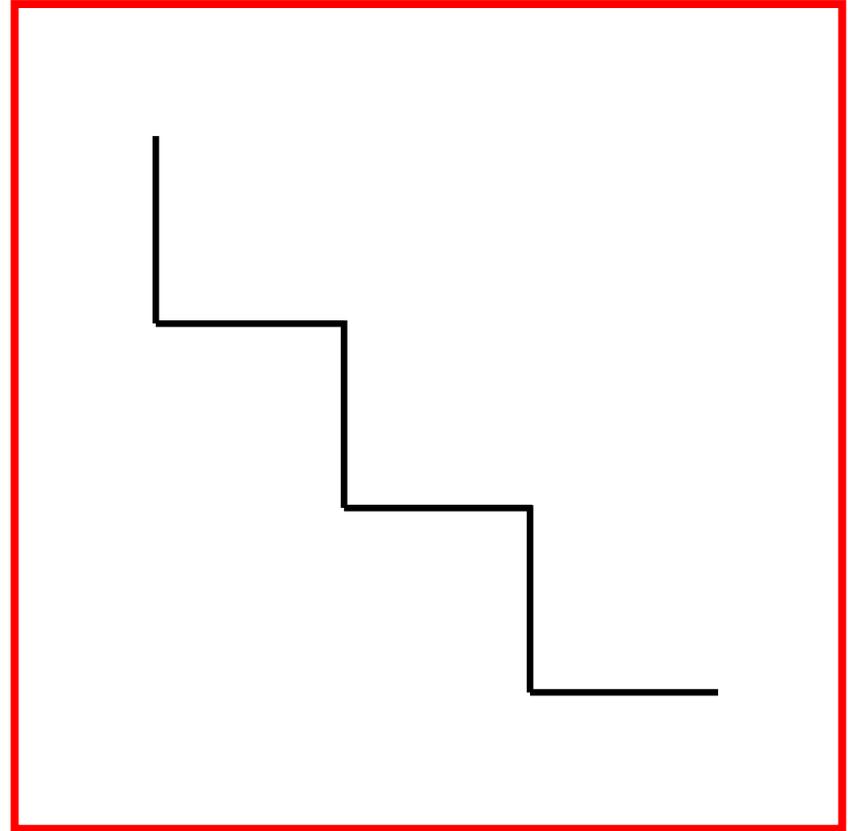
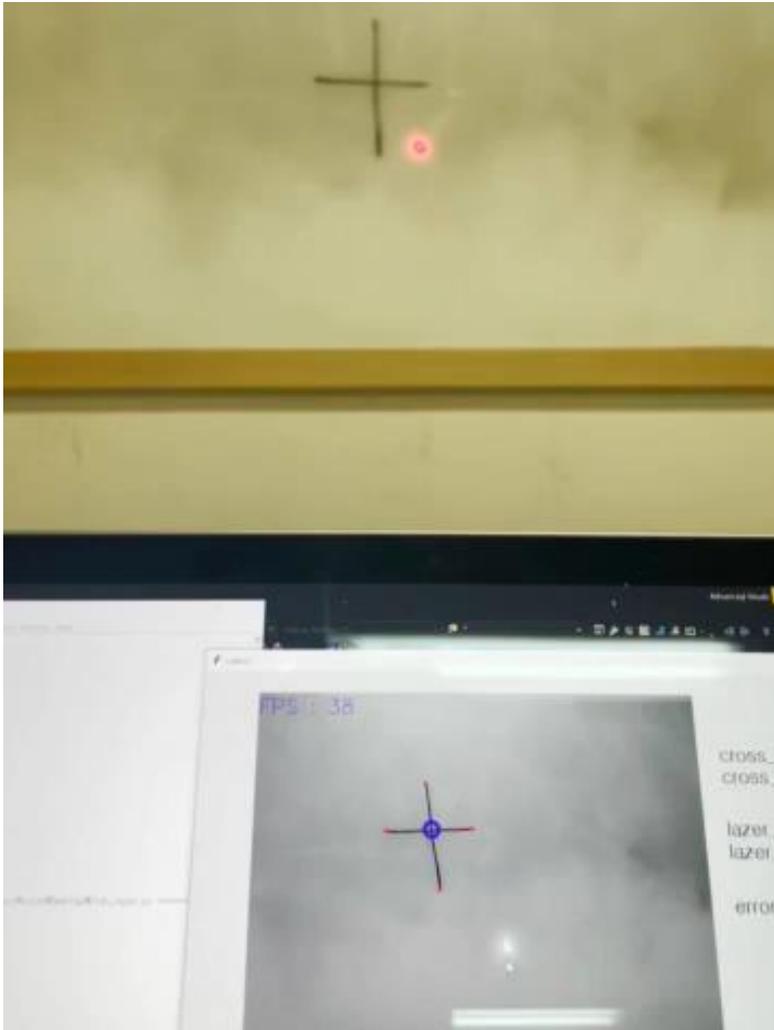


기존방식

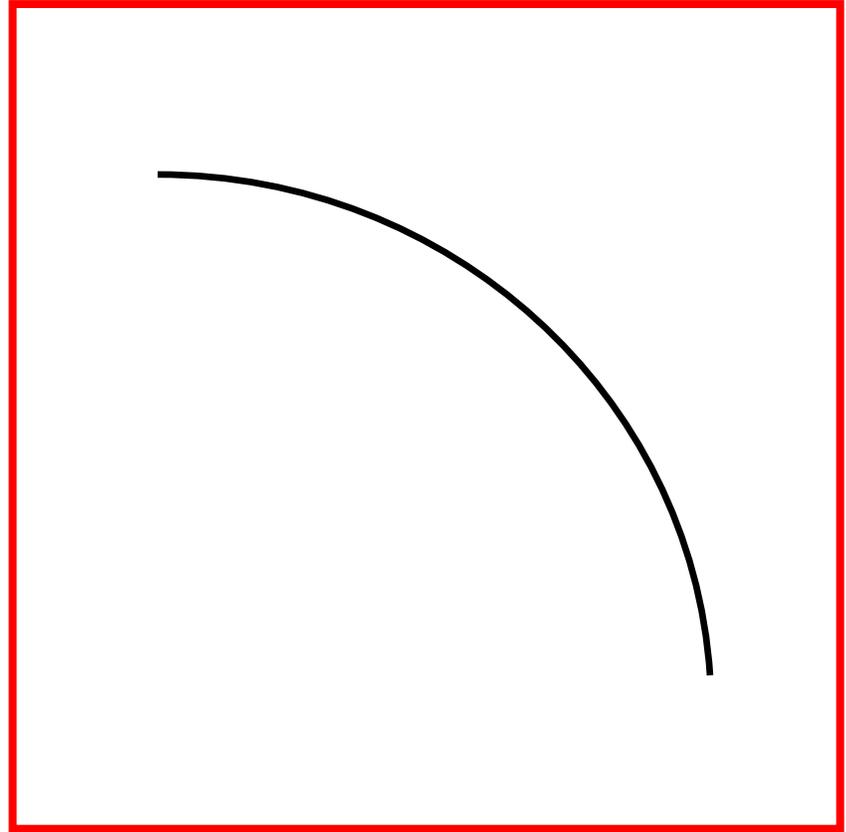
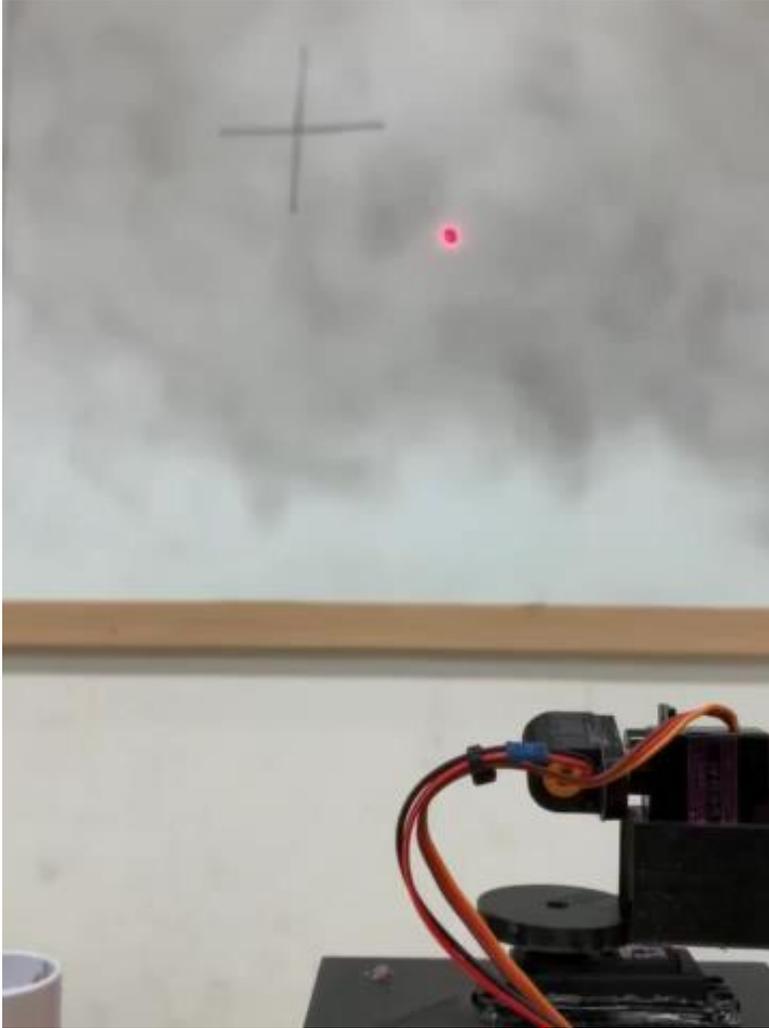


PID

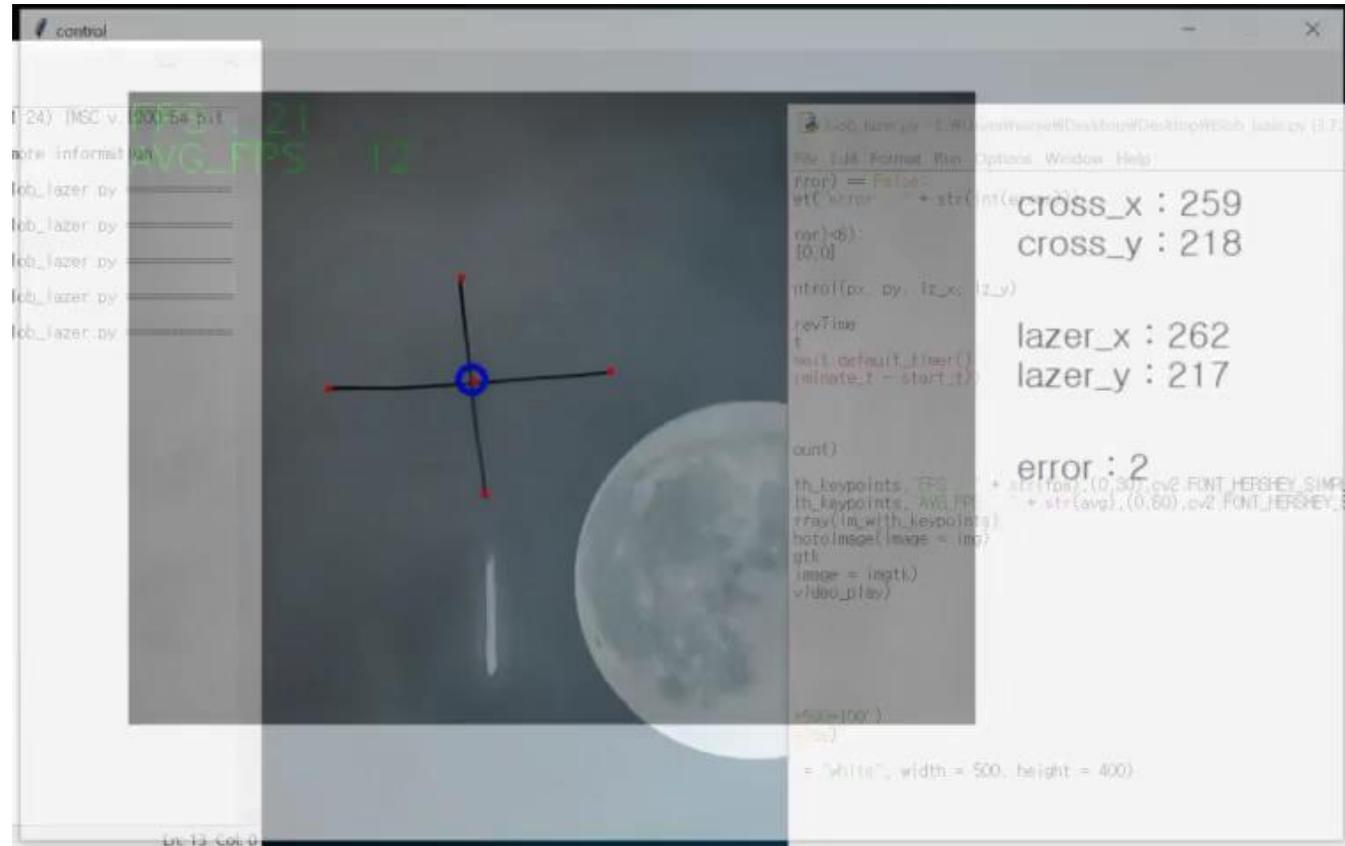
PID추가_적용X



PID추가_적용O

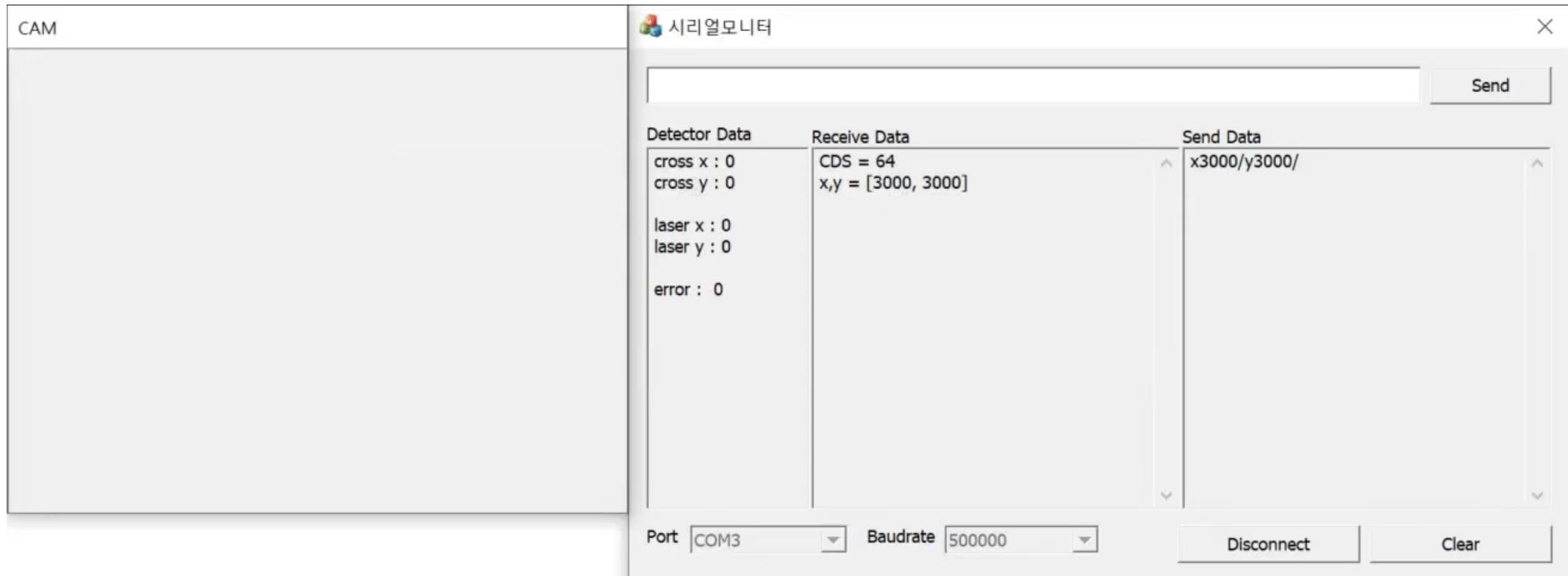


FPS 비교_Python



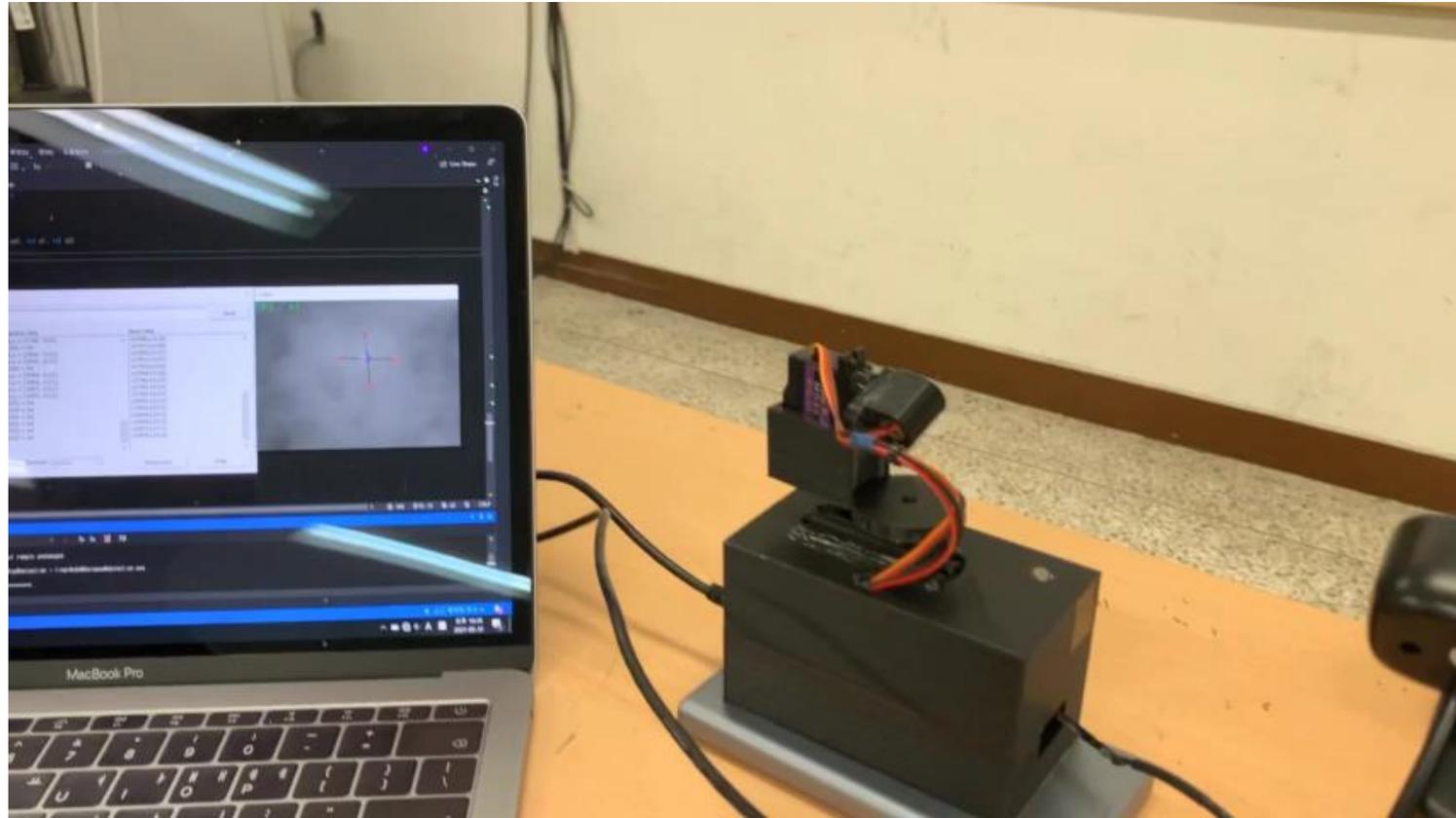
Python AVG : 16(fps)

FPS비교_C++



C++ AVG : 29(fps)

CDS추가

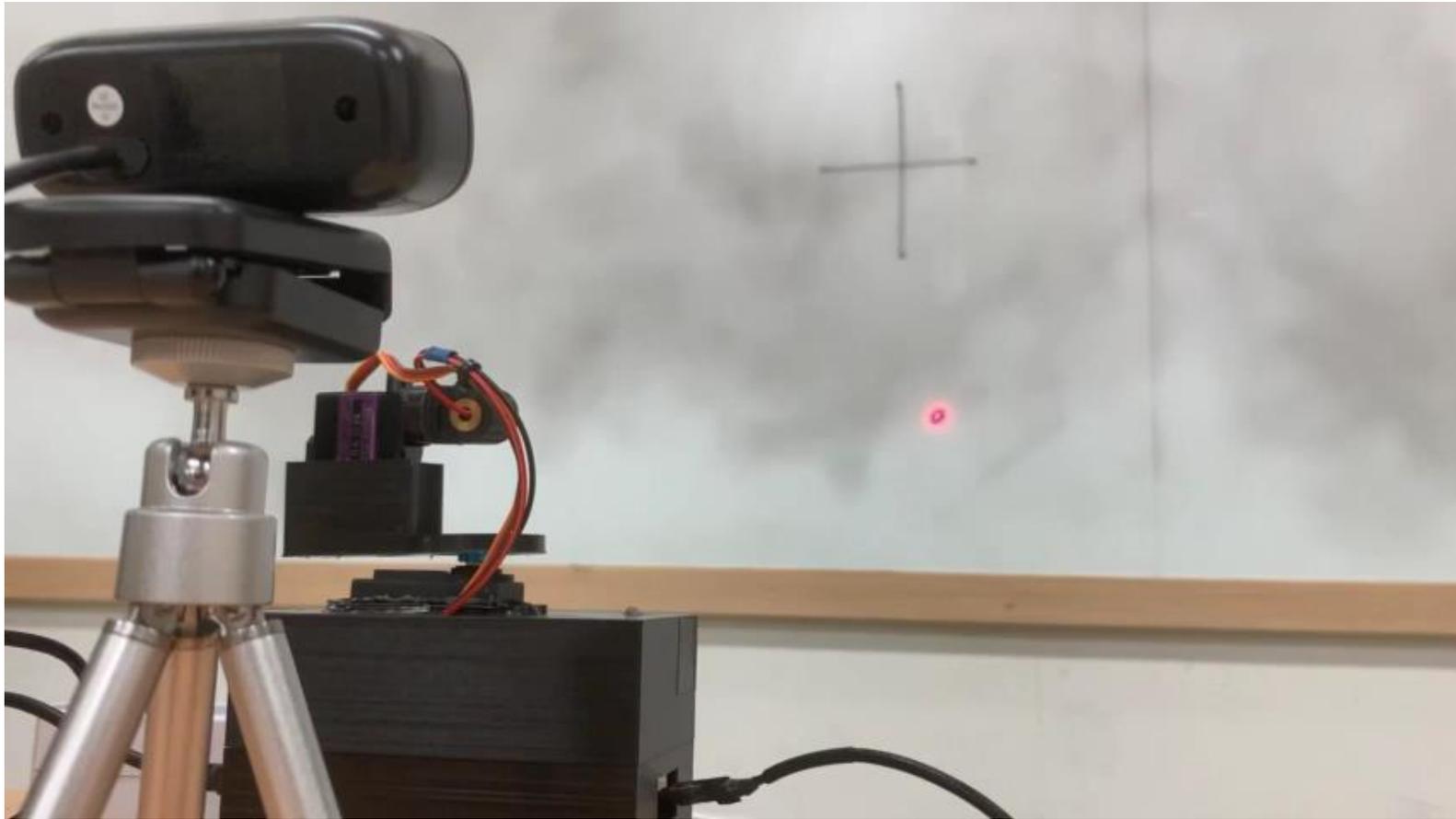


CDS센서를 장착하여 CAM밝기조절

시연영상_전면



시연영상_후면



기여도

박창순(S/W 30% + H/W 10% + PPT 및 UCC 10%) : 50%

연욱모(S/W 10% + H/W 30% + PPT 및 UCC 10%) : 50%

Q & A