

Image courtesy of Rob and Noah



Rigged for laser to be in cam's field of view

Object Avoidance: Pulse Control for Frame Subtraction

by Stephanie Cheng

Gabriel Elkaim, Rob Kelbley, Noah Wilson

This project was a continuation of Rob Kelbley and Noah Wilson's work. They had the realization that the project was possible. I came into the picture to look into lasers and automating the pulses in the frame subtraction process.

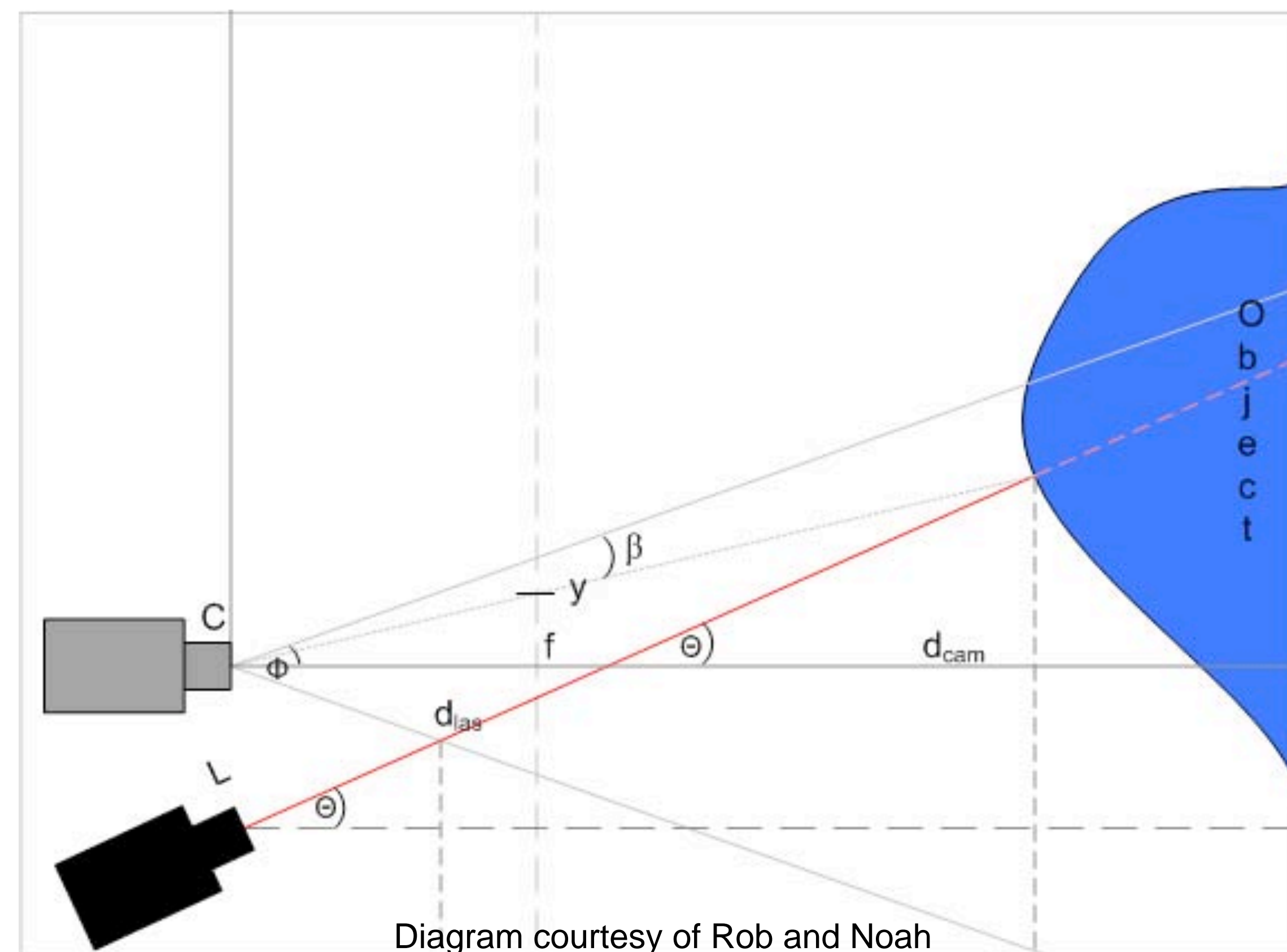


Diagram courtesy of Rob and Noah

Developed using:
Logitech QuickCam 4000 Pro
Laser w/ cylindrical striper lens
M68MOD912C32 MCU Module
Metrowerks CodeWarrior
Microsoft Visual Studio
Computer Vision applications

Mission:

- Find out what triggered the shutter
- Hunt for suitable lasers
- Control the pulses

Motivation:

Create an inexpensive simpler object avoidance system relative to the systems on the market.

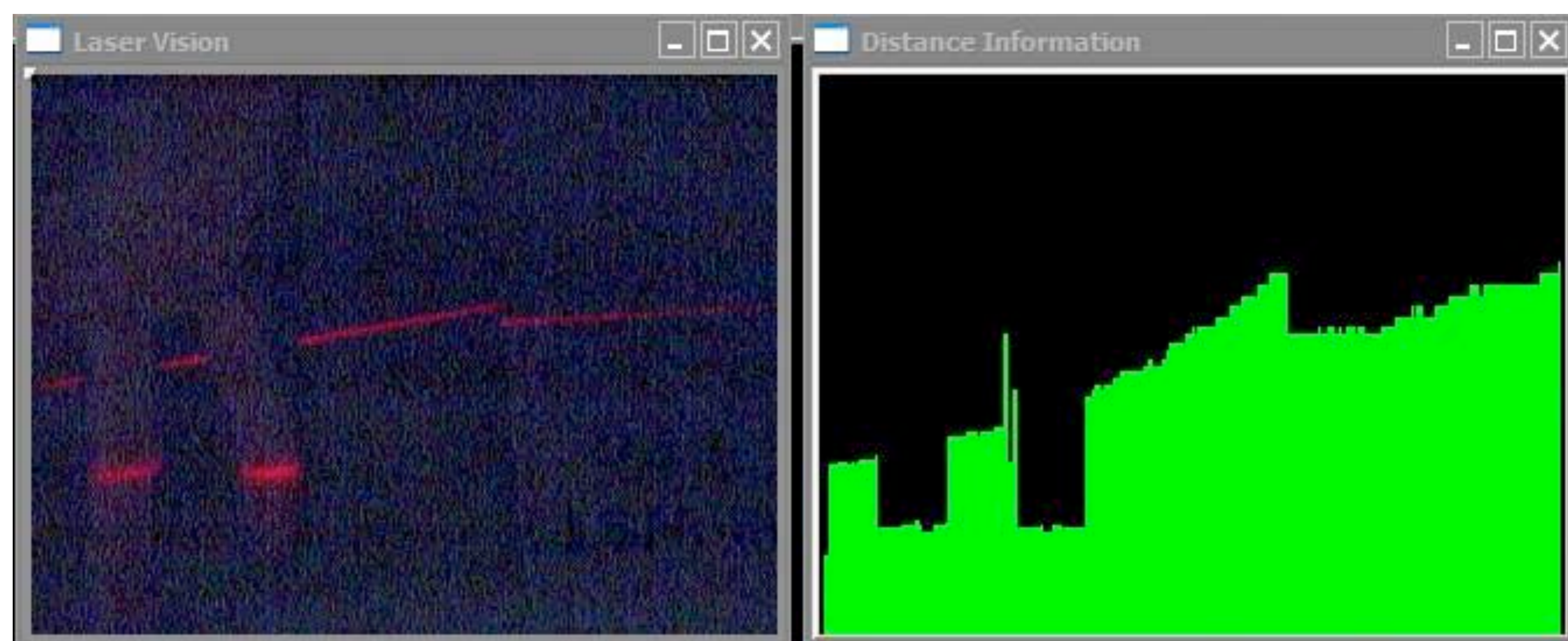
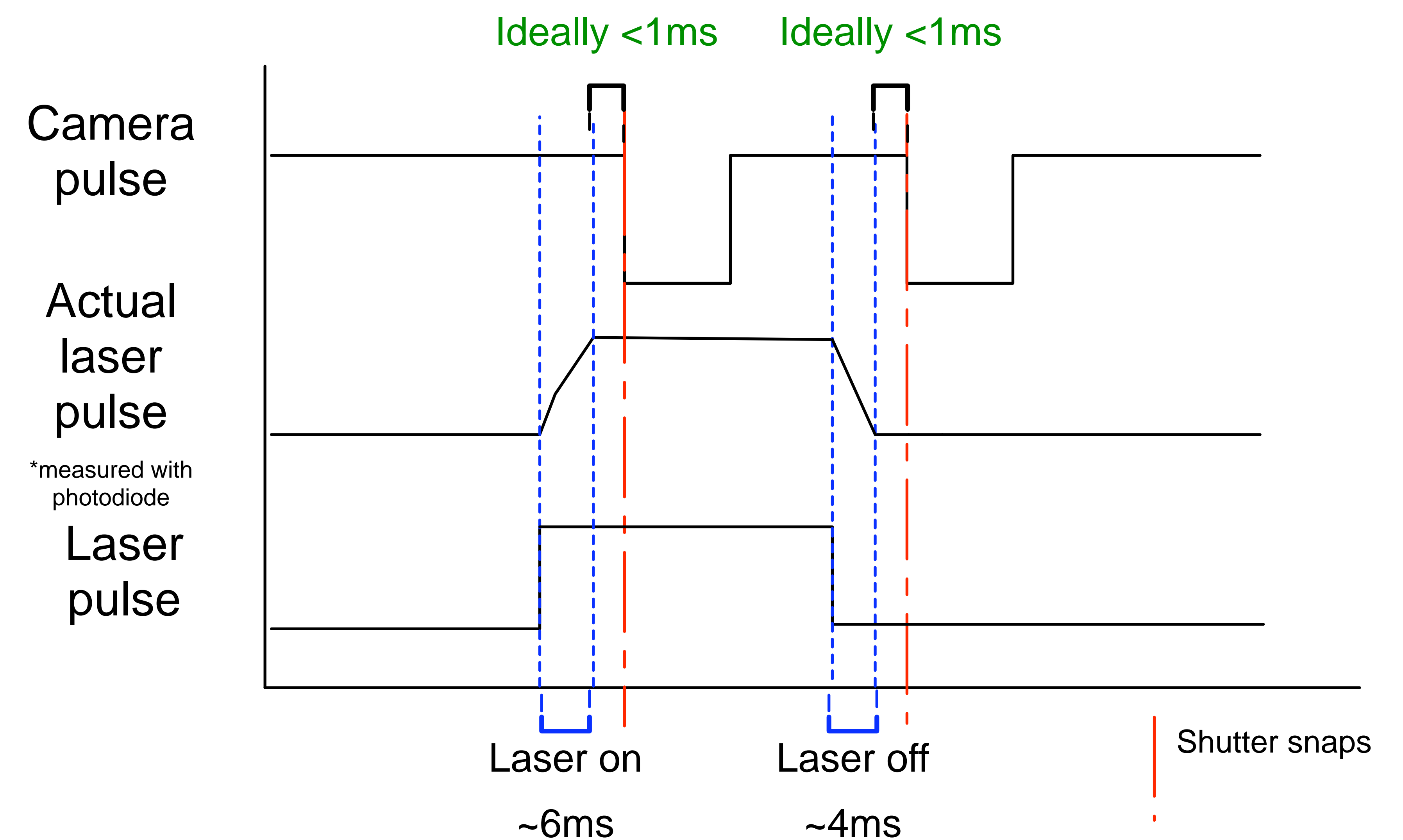


Image Courtesy of Rob and Noah



Acknowledgments: Rob Kelbley, Noah Wilson, Daniel Garalde