Laser Control GUI

Optical Engines, Inc develops high power laser systems, performs cutting edge R&D for leading scientific firms and universities, and delivers high quality custom fiber devices. We create exceptional solutions with hardware and software hand in hand. Our current GUI that controls our laser systems has gone through many revisions over the years and it is time for another one. This revision is a change of framework and general maintenance improvement. It includes a change to the style to match other more recent projects developed by Optical Engines, Inc. And you'll get to work with lasers!

The Project

Current (Version 5.2.0) of the Laser Control GUI
Objectives
- Recreate functionality of current Laser Control GUI
- Improve current logging capabilities
- Create a resolution-aware and DPI-aware desktop application
- Selective backwards compatibility with older Laser Control firmware
- Match style of newer GUI development (picture below)
- Reach Goal: Integrated arbitrary pulse generator

Learning
- Technologies
  - C#
  - WPF
  - Windows
  - High Power Fiber Lasers!
- GitHub with CI
- Test Driven Development with MSTest unit tests

Details
- Preferred team size: 3-5 students
- Potential for student internship(s)
- Work performed remotely and some on-site in Colorado Springs

A Laser System output
Existing GUI (style example)