Vision-based Feedback for Additive Manufacturing

PROJECT DESCRIPTION

The project will look at developing a vision based feedback system for a linear axis actuator. You will adapt a z-axis positioning system to a Plasma Transfer Arc Additive Manufacturing (PTA-AM) torch. Software integration must be implemented to add the new axis to a previously X & Y Axis controller. Mechanical setup for the new axis is required. Motor and slider mechanical characterization has to be implemented. Positioning controller is required.

FACULTY-DEPARTMENT

Engineering - Mechanical

DESIRED FIELD OF (STUDENT) STUDY

Electronics, Mechatronics, computer, or Mechanical Engineering

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

1

INTERNSHIP START DATE

January 2, 2018

INTERNSHIP END DATE

12 Weeks from start date

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.