Wyatt Clark

Mechanical Engineer

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EXPERIENCE

The U.S. Naval Research Laboratory / SSEP Student Program

September 2021-Present | Washington DC

Working as a "Student Trainee Mechanical Engineer" this federal civil service position allows students to work as federal employees while going to school. I work in the Optical Science Division on fiber optic sensing technologies.

Lowell Observatory / Mechanical Engineering Intern

August 2019 - Present | Flagstaff Arizona

Responsible for engineering design, analysis, and manufacturing for many ongoing projects. Additional responsibilities include manufacturing optical fixtures, data communication, Zygo operation, optical train design/maintenance, and design consultation. Specific projects include integrating 1-meter telescopes and the development of new control systems for critical components of the NPOI.

The U.S. Naval Research Laboratory / NRIEP Student Intern

May 2019–August 2019, May 2020-August 2020, May 2021-August 2021 | Washington DC

Assembled and tested submersible sensor packages. Worked with fiber optic sensing technologies for remote sensing. Analyzed fiber optic strain data recorded on Navy hovercraft. Generated FEA to brief to PMS-377 and Assault Craft Unit 4, results to be incorporated operating procedures.

U. S. Naval Observatory/ SEAP Summer Intern

June 2017-August 2017, June 2018-August 2018 | Flagstaff Arizona

Aided in the development of a dark sky monitoring system. Wrote scripts to facilitate the use of the Earth Orientation program. Designed thermally passive guide scope. Assisted with public outreach events. Worked with. Assisted at the NPOI on a project to correct starlight wavefront distortion with deformable mirrors. Recoated silver and aluminum mirrors.

EDUCATION

Northern Arizona University / Bachelors of Science

2018 - 2022 (predicted), Flagstaff Arizona

Bachelor of Science in Mechanical Engineering. Dean's List student.

SKILLS

Optical component mounting •
Adhesive bonding (fiber installation and structural) •
Optical maintenance, cleaning, repair, and design • SolidWorks (CAD) • Machine shop (CNC and hand) • Arduino/ Raspberry Pi •
3D printing • Splice optical fiber • soldering/ connectors/ cabling •
Windows/ Mac/ Linux • MATLAB/ Python/ Java/ C++• Good leadership skills and able to work independently • Excellent written and verbal communication skills • Proficient with Microsoft Office

AWARDS

Flagstaff Stem Student of the

Year: Stem City

Arizona/New Mexico Dean's List Student Award: FIRST Robotics

Northern Arizona University:

Deans List (Currently 3.93 GPA)

PUBLICATIONS

Experimental Verification of Compliant Mirror Wavefront Correction Using a Single Actuator | SPIE - 2018

The Navy Precision Optical Interferometer: two years of development towards large-aperture observations | SPIE - 2020