

# SUMMER ROMAN NICKS

## MECHANICAL ENGINEER

### PROFILE

Imaginative mechanical engineer with 7+ years of experience in diverse engineering projects. Proven leader who works well with a team to develop creative strategies and bring them to life. A self-starter that is focused on continuous improvement with dedication to efficiency. Capable in fast paced, changing environments. Passionate about learning new skills and interdepartmental collaboration to meet multifaceted project demands. Experienced with automation, rapid prototyping, optomechanical systems, design for manufacturing and assembly (DFM & DFA), production on site or with supplies.

### EDUCATION

B.S. in MECHANICAL ENGINEERING  
University of Colorado – Boulder

- Graduated 2017
- Emphasis in energy

### CERTIFICATES

COLORADO EIT (FE certified)  
ASME Y14.5 GD&T (2019)

### INTERESTS

 Aerospace     Opto-mechanics  
 Green Energy     Robotics

### EXPERIENCE

#### Mechanical Engineer

Imatest LLC

April 2021 - Present

- Creating and implementing standards to support the growth and scalability of the hardware department for opto-mechanical systems.
- Designing new opto-mechanical hardware products for image quality testing for the aerospace, medical, and automotive sectors.
- Interdepartmental collaboration for the testing and development of products using rapid prototyping with 3D printer, laser cutter, and desktop CNC mill.
- Developing and incorporating automated hardware solutions using Python, C/C++ and MATLAB. Driving force to implement our own controllers to link with software to reduce cost by 60% and provide greater flexibility and more sourcing options.
- Established a new source for our primary materials, reduced lead time by 50% for a superior product with a 10% decrease in cost.

#### Manufacturing Engineer

Specialty Products Company

May 2018 - August 2019

- Managed the design of new equipment, fixtures, processes, procedures, and systems for manufacturing and production utilizing lean manufacturing methods.
- Developed a process, organization, and documentation to decrease setup time by 60% for 40 machinists on 16 machines.
- Upheld quality standards to maintain ISO 9001, IATF 16949, and SHARP certifications.
- Designed, programmed, and integrated UR Cobot to automate manufacturing processes and CNC tend.
- Maintained and revised existing CAD models, assemblies, and drawings.
- Worked with quality assurance team to troubleshoot complex manufacturing problems.

#### Systems Engineer

Senior Project: NBA Milwaukee Bucks sideline chair

August 2016 – May 2017

- Designed and manufactured ergonomic sideline chairs for NBA players' proportions to enhance performance and prevent injuries.
- Established as a versatile engineer with a working knowledge of and adaptability to all fields.
- Facilitated cohesive teamwork and led team past roadblocks.
- Took an active role in research, testing, data and thermal analysis, CAD, electrical systems, automation, and manufacturing prototypes.
- Collaborated with an international team based in New Zealand.

### SKILLS





- Solidworks (CAD)
- Creo/Pro-E
- DFA & DFM
- Hardware Design
- Rapid Prototyping
- Optomechanics
- Image Science
- Spatial Reasoning
- Robotics & automation
- Electromechanics
- Machining
- Adobe Suite
- Thermodynamics
- Production management
- Communication

### REFERENCES

Jackson Knappen  
Imaging Scientist at Imatest  
410.570.9590

Flora Quinby  
CEO and Founder of Coterial  
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(currently located in EU)

### CONTACT

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