

Thomas Collins

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Objective: Find a full-time aerospace engineering position. Emphasis on Propulsion and Spacecraft Mechanical Engineering.

Education: University of New Hampshire – *College of Engineering and Physical Sciences*

Jan. 2017 – May 2020, anticipated

GPA: **3.24/4.0** | B.S, Engineering Physics | Minor in Mechanical Engineering

University of Maine, Orono – College of Engineering August 2015 – Dec

B.S, Engineering Physics

August 2015 – December 2016

Tech Skills:

Solidworks | MATLAB | Visual Basics for Applications | Mastercam | LabView | 5 Axis Machining | GitHub

Experience:

TURBOCAM, International

May 2019 - present

Engineering Intern

- Operated electrochemical machines and 5-axis mills.
- 5 Axis Mill toolpath programing using Mastercam
- Root cause analysis leading to implementation of corrective measures.
- Strict attention to detail throughout the engineering process.
- Developed data analysis software for data management and control. Data considerations consisted of material analysis, characterization, and testing.

Nuclear and Particle Physics Group - University of New Hampshire

August 2018 - August 2019

Undergraduate Research Assistant

- Maintained hardware standards, testing standards, and designed safe processes for radioactive material.
- Assigned projects to work on independently and with senior lab personnel.
- Assisted professors in development and implementation of experiments.

UNH Engineering Physics and Mechanical Engineering

January 2018 – present

Undergraduate Researcher

- Study of Engineering Physics Major curriculum, including Classical mechanics, quantum physics, and optics.
- Study of Mechanical Engineering Minor curriculum, including thermal systems, control systems, and fluid dynamics.

Relevant Orgs:

UNH Students for the Exploration and Development of Space

August 2017 - present

Vice President, Frame Lead

- Board member, in charge of the Member Body and leading Frame Team.
- Led mechanical fabrication of a rocket frame through design engineering and drafting with successful integration of each program's components. Critical to our Hybrid Rocket with a propulsion unit capable of 300lbs of thrust.
- Architectural design of the rocket frame generated through computer aided engineering solutions and analysis of mechanical design through finite element analysis.
- In charge of general member involvement and assisting the president with club organization and structure.
- Placed 2nd in the 2018 Undergraduate Research Conference in Mechanical Competition Teams.

Society of Physics Students Member

January 2017 – present

- Academic Society devoted to creating a community for the Physics and Engineering Physics students on campus.
- Assist undergraduates in General Physics 1-2 and Calculus 1-2

Extracurricular Activities:

Brother of Alpha Kappa Psi

January 2017 - January 2019

- Business Professional Fraternity. Devoted to shaping people in professional ways to enhance modern business.
- Judiciary Board Member.

UNH Archery Member

Fall 2017 - present

Athletic club including weekly practice and yearly competitions.