Nolan B. Sankey

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Education

Dartmouth College - Sept 2017—March 2022 (expected)   Hanover, NH
- Bachelor of Engineering in Mechanical Engineering; Physics, Math Minors; GPA: 3.97/4.00, Major GPA: 4.00/4.00
- *Relevant Coursework*: Machine Engineering, Mechatronics, Systems Engineering, Control Engineering, Digital Electronics, Structural Analysis, Solid Mechanics, Object-Oriented Programming, Operations Research

Steamboat Springs High School - Class of 2017   Steamboat Springs, CO
- Class Valedictorian

Relevant Experience

Startup in Stealth Mode   Bay Area, CA
Mechanical Engineering Intern - December 2020—March 2021, June 2021—September 2021
- Designing, analyzing, and constructing mechanical, electrical, fluidic, and thermal systems for an innovative biotechnology instrument and performance validating testbenches.
- Hands-on experience with sensors/actuators (motors, valves, gauges, heaters, TECs, heat sinks, thermocouples, RTDs, fluidic sensors) and manufacturing equipment (hand tools, band/miter saws, mill, wire harnesses).
- 3D modeling using Solidworks software and collaboration with vendors for component manufacturing.
- Troubleshooting work on mechanical/electrical failures, control system performance, and vibrational isolation.
- Developing thoroughly written manufacturing instructions, acceptance testing plans, and device history records.

Dartmouth College   Hanover, NH
Machine Learning Aircraft Recovery - December 2019—Present
- Optimized airline schedules to create more efficient disruption responses using machine learning.
- Only undergraduate working on the project; independently learned and immediately utilized Python.
- Constructed a model using past flight schedules and cost data, wrote a unique recovery algorithm, programmed a solver to optimize the assignment of aircraft, and trained ML classifiers to recognize effective solutions.

Thayer School of Engineering   Hanover, NH
Pings for Positive Change - March—June 2019
- Collaborated with 4 team members to invent and build a wearable notification device that utilizes information gathering technology to help eliminate sexual violence and harassment on college campuses.
- Awarded the *Phillip R. Jackson* Award in recognition of the most outstanding project of the term.
- Lead development of all hardware and software components of the project; responsible for timely ideation, design, and creation; incorporated client feedback throughout development.

Leadership Experience

Dartmouth Outing Club Biathlon, *President/Founder* - May 2018—Present   Hanover, NH
- Founder of club and coordinator of all operations, activities, and finances.
- Representative to Outing Club Directorate: planning and executing campus-wide events.

Dartmouth Skiway, *Dartmouth Ski Patrol: Shift Supervisor* - Sept 2017—Present   Lyme, NH
- Leading and working with a team to respond to difficult, stressful situations and make quick, informed decisions.
- Managing day-to-day operations in addition to consistent training and incident response.

Skills

Engineering Skills: Solidworks , MATLAB, Excel, Shop Tools, Electrical Wiring/Crimping, Soldering, Process Documentation
Programming Skills: Java, Python, HTML, CSS, Arduino, VHDL, ACS Motion Control
Soft Skills: Leadership, Problem Solving, Teamwork, Grit, Independent Thinking, Creativity, Strategic Insight