Nolan B. Sankey

(970)-819-0065 - nolan.sankey@gmail.com - nolansankey.me

Education

Dartmouth College, Thayer School of Engineering - Sept 2017—March 2022

Hanover, NH

- Bachelor of Engineering: Mechanical Engineering; Minors: Physics, Math; 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

Relevant Experience

Ultima Genomics Inc. Fremont, CA

Mechanical Engineer II - May 2022—Present

- Project Lead and Head Mechanical Design Engineer for DNA sequencing instrument consumable loading module.
- Hands-on experience with design life-cycle, from ideation to implemented finished product.
- Engagement with teams throughout the company to define and evaluate project specifications and performance.
- Responsible for leading comprehensive design review presentations and small group engineering meetings.
- System-wide problem solving to troubleshoot critical, time-sensitive downtime issues.
- Promoted to current level after only 7 months of full-time employment; top 10% employee in 2022 review cycle

Mechanical Engineering Intern - December 2020—March 2021, June 2021—September 2021

- Designing, analyzing, and constructing mechanical, electrical, fluidic, and thermal systems.
- 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).
- Developing thoroughly written manufacturing instructions, acceptance testing plans, and device history records.

Dartmouth College; Thayer School of Engineering

Hanover, NH

Novel Expandable Endotracheal Tube - September 2021 — March 2022

- Led a team to design and construct a prototype expandable artificial airway for use in medical procedures.
- Ideated design mechanisms supported simpler physician workflows and reduced harmful impacts to patients.
- Body of work shared through detailed engineering reports and professional presentations.

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 reduce instances of sexual violence and harassment on college campuses.
- Lead development of all hardware and software components of the project; responsible for timely ideation, design, and creation; incorporated client feedback throughout development.
- Awarded the *Phillip R. Jackson* Award in recognition of the most outstanding project of the term.

(more on nolansankey.me)

Leadership Experience

Dartmouth Outing Club Biathlon, *President/Founder -* May 2018—March 2022

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—March 2022

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, Excel, MATLAB, Machine Shop Tools, Wiring, Soldering, Process Documentation

Programming Skills: Python, Java, HTML, CSS, Arduino, VHDL, ACS Motion Control

Soft Skills: Leadership, Problem Solving, Teamwork, Grit, Independent Thinking, Creativity, Strategic Insight