Daniel Morton

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EDUCATION

Stanford University **Expected: April 2023**
M.S. Mechanical Engineering *Stanford, CA*
- Focus: Robotics, Kinematics, and Autonomous Systems
- Honors: Finalist, Knight-Hennessy Scholars Program

Cornell University **May 2021**
B.S. Mechanical and Aerospace Engineering *Ithaca, NY*
- GPA: 4.14/4.30
- Honors: Summa cum laude, 2019 McManus Design Award, 2019 Goethe Prize for Writing
- Activities: ASME, Orientation Leader, Tau Beta Pi, Reserve Tennis, Ski Club, Order of Omega, Delta Tau Delta

WORK EXPERIENCE

Organic Robotics Laboratory, Cornell University **Aug. 2018 – Present**
Undergraduate Researcher *Ithaca, NY*
- Lead researcher on a 3D-printed soft robotic morphing wing using intelligent compliant lattice structures with embedded fiber-optic sensing
- Directed three graduate students across design, analysis, and testing of the project
- Developed topology optimization / design workflows to save 100+ hours across multiple students' research

NASA Marshall Space Flight Center **June 2020 – Aug. 2020**
Intern, Propulsion Research & Technology *Huntsville, AL / Remote*
- Conceptual modeling of a nuclear-thermal airbreathing vehicle launched from a magnetically-accelerated track
- Formed preliminary configurations around desired payloads and propulsive/electrical/aerodynamic constraints
- Programmed tools to create, analyze, and optimize 3D-printed heat exchangers

Boeing **May 2019 – Aug. 2019**
Intern, Product Development *Mukilteo, WA*
- Designed electronic attachment parts for rapid turnaround on the 2019 ecoDemonstrator flight-test airplane
- Led a team of six to design a new stowage structure integrated into the cabin floor, improving accessibility and safety for passengers. Pitched a full-scale mock-up to executives
- Filed for a patent on the above design

VOLUNTEER EXPERIENCE

Cornell Bio-Inspired Fluids Laboratory **May 2020 – Aug. 2020**
Designer – COVID-19 Air Filters *Ithaca, NY / Remote*
- Created bifurcating filtration structures, to be deployed in rapidly-produced 3D-printed face masks

Weill Cornell Medicine **Apr. 2020 – June 2020**
Designer – Artificial Heart Structures *New York, NY / Remote*
- Modeled structures which transition between the systolic/diastolic phases of the heart under hydraulic actuation

SKILLS & INTERESTS

- **Software:** CATIA v5, Autodesk Inventor, SolidWorks, Fusion 360, AutoCAD, COMSOL, nTopology
- **Coding:** MATLAB, C, C++, Arduino/microcontroller programming, LaTeX
- **Miscellaneous:** 3D-printing, product design, machine shop trained (mill and lathe)
- **Interests:** Watchmaking, road-tripping, skiing, golf, tennis, hiking, tiramisu
- **Other:** Eagle Scout (2016)