Yanis Yankauskas

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Education

University of California Santa Barbara **Expected June 2026**

Bachelor of Science (B.S.) in Mechanical Engineering - GPA 3.9

- Dean's Honors: Every Quarter
- Relevant Courses: Dynamics, Strength of Materials, Electronic Circuits, Statics

Professional Experience

Undergraduate Lab Assistant **June 2023 – Present**

California NanoSystems Institute – CNSI

- Identified several failure points in a laboratory tool and re-designed the tool to be safer and easier to operate in SolidWorks; manufactured, tested, and wrote the SOP, decreasing maintenance time by 50%
- Led a team of 4 to develop, prototype, and manufacture a precision wind tunnel fixture frame and tensioning mechanism for a researcher, decreasing experiment setup time by 75% and ensuring precise alignment
- Coordinated, designed, and fabricated more than 65 precision laboratory parts in accordance with researcher requirements using laboratory tools: CNC, Lasercutter, Lathe, Bandsaw, etc.
- Trained over 80 undergraduate and graduate students on over 10 tools and procedures

Mechanical Engineering Internship **June 2023 – Present**

Healthy Tech LLC.

- Designed electronics packaging for a consumer biomedical electronics product intended for mass production using Fusion 360
- Corresponded with an injection molding manufacturer to machine molds and produce $>$2000 units
- Developed a Low-Energy Bluetooth application in C on the Zephyr RTOS for an nRF SoC and programmed I^2C and SPI drivers to collect and broadcast temperature sensor data and run LEDs

Undergraduate Student Research Assistant **September 2022 – June 2023**

Hansma Research Lab

- Developed multiple 3D-printed prototypes in SolidWorks to repackage a clunky biofeedback device into an ergonomic handheld case, which allowed subjects to use the device at home to collect more data
- Developed a low-energy Bluetooth circuit in KiCad to replace the old biofeedback device electronics, reducing quiescent power draw by 99%, assembly time by 90%, and cost by 30%
- Evaluated the use of injection molding to manufacture the cases, coordinated the use of an injection molding machine, and designed molds in Onshape to be SLA 3D-Printed, produced $>$45 units 95% faster and 60% cheaper

Experience

Aerodynamics Team Member **September 2022 - Present**

UCSB Formula Society of Automotive Engineers – FSAE

- Created design requirements for a carbon fiber curing oven and jointly authored a proposal with hand calculations describing the construction, power requirements, thermal losses, and maximum temperatures
- Led an interdisciplinary team of 5 to design a curing oven in Onshape made out of 6 panels with a singular electronics panel that can be easily disassembled for storage and a temperature PID controller
- Ran design of experiments computational fluid dynamics simulations in Ansys to pick the airfoils, element placement, and angle of attack for our rear wing, increasing downforce by 25% compared to last year

Skills

Software: SolidWorks, Fusion 360 CAD & CAM, Matlab, Ansys, KiCad, Autodesk Inventor, Onshape, Blender
Mechanical: CNC Mill, Lathe, 3D Printing (FDM, SLA), Laser Cutting, Hand tools, Water-Jet
Electrical: Soldering, Wiring, Crimping