SAMUEL SARZEN

Santa Barbara, CA • (732) 996-0440 • samsarz714@gmail.com • www.linkedin.com/in/samuelsarzen • samsarzen.com **EDUCATION**

UNIVERSITY OF CALIFORNIA- SANTA BARBARA

Major: Bachelors of Science in Physics and Bachelors of Science in Applied Mathematics

- Cumulative GPA: 3.56/4.00, College of Letters and Sciences
- Honors: UCSB Honors Program (September 2024 present), UCSB Deans Honors (Winter 2024)

MANASOUAN HIGH SCHOOL

Advanced Diploma

- GPA: 4.0/4.0 (Unweighted) 4.3/4.0 (Weighted)
- Honors: Academy of Finance (grades 9-12), National Honor Society (grades 11 & 12), Honor Roll (grades 9-12)

PROFESSIONAL EXPERIENCE

CHANNEL ISLANDS SURFBOARDS

Sander

- Experience refining and polishing surfboards for a large scale manufacturer with a strong focus on consistency and precision.
- Sanded 100+ surfboards in a fast-paced manufacturing setting, ensuring high-quality finishes.

MENCEL SURFBOARDS

Sander

- Progressed from factory cleaning duties to surfboard repair, fin installations, routing, airbrushing, laminating, and more. •
- Completed and worked on 500+ surfboards and repaired 400+ by working 40+ hours weekly while attending school. •
- Developed a complex understanding of multiple composite materials, such as polyesters and polyurethanes through working hands-on, in a team oriented environment.

HAGER RICHTER GEOPHYSICS

Summer Intern

- Assisted with soil resistivity and ground-penetrating radar (GPR) surveys ultimately used for civil and environmental engineering development projects across New York City.
- Collected and analyzed geophysical data for engineering applications. •

SPRING LAKE OCEAN RESCUE

Beach Lifeguard

- Enforced beach rules, educated visitors about safety, became skilled in emergency first aid, and maintained physical readiness for emergency response.
- Conducted 40+ open-water rescues and enforced beach safety regulations.

ZETA PSI

Treasurer

Managed fraternity finances (\$30,000+ per UCSB quarter), including budgeting, expense tracking, and dues collection, ensuring financial stability and transparency.

V.P. Social Events

• In charge of planning and organizing all fraternity social events between other sororities and fraternities.

EXTRACURRICULAR EXPERIENCE

UCSB SOCIETY OF PHYSICS STUDENTS Member **GAUCHO ROCKET PROJECT**

September, 2023 - June, 2027

September, 2019 - June, 2023

February, 2024 - November, 2024

August, 2021 - August 2024

July 2024

May, 2023 - August 2024

May 2024 - December 2024

November 2024 - Present

September, 2024 - Present

October, 2024 - Present

Team Member

- Collaborate on a team of other undergraduate scientists and engineers to design, build, and launch a robust model rocket.
- Member of the design team, responsible for using CAD to develop and design various parts of the rocket.

UCSB PHYSICS ORGANIZATION FOR INNOVATION AND TECHNOLOGY Member

- Engineering focused physics project based club, I am currently working on developing and constructing a drone.
- PHYS 150 (Winter 2025 Final Project/POINT): Designing and implementing a high-precision scanning device utilizing photon detector technology for advanced optical measurement and analysis, alongside Prof. Dave Stuart UCSB.

UCSB SURF TEAM

Member

MANASQUAN HIGH SCHOOL SURF TEAM Member

VOLUNTEERING

SEA GIRT HOMEWORK CLUB (GRADES 11 & 12)

Founder & Lead Tutor

• Provided an outlet for younger elementary students to learn in an encouraging environment through free tutoring.

SKILLS

- Technical: Soldering, Electronics (Arduinos, Accelerometers), subtractive manufacturing, etc.
- **Programming Languages: Proficient:** Python, Java, JavaScript, and CAD | Novice: MATLAB.
- Soft Skills: Leadership, communication, time management, teamwork.
- Languages: Proficient: Spanish.
- Other Skills: Balancing a busy class schedule, oftentimes taken almost double the average course load while also being involved in clubs, extracurriculars, and work.

September, 2021 - June, 2023

September, 2020 - June, 2022

September, 2023 - Present

January, 2024 - Present