

Sean Sims

187 SW 129th Terrace, Gainesville, FL, 32669 | seansims1@ufl.edu | 352-275-2137

Education

University of Florida

Herbert Wertheim College of Engineering Dean's List
Mechanical Engineering track
Expected graduation: May 2026

Current Cumulative UF GPA: 3.73

Coursework: Statistics 1; Intro Biomolecular Engineering; Calculus 1, 2, 3; Physics with Calculus 1, 2; Chemistry 1, 2; Professional Communication for Engineers; Elements of Electrical Engineering; Computer Aided Graphics; Programming for Engineers; Differential Equations; Statics; Materials; Thermodynamics

Clubs and Organizations: Rock Climbing Club, InnoGators Design Team, Club Tennis, Outdoor Adventure Recreation

Community Service obtained: 100 hours

Gainesville High School - Graduated May, 2022

Dual Enrolled at Santa Fe College

Activities and Experience

Volunteering, Sandhill Thoroughbred Rescue

May 2020 – Dec 2021

Caretaker for retired racehorses and cows. Feeding, cleaning, assessing and reporting any injuries.

Engineering internship, Matrix Seating USA

May 2023 – Aug 2023

- Assisted with on-site fittings, material processing, hardware design, and the manufacturing of custom molded seating systems.
- Assisted engineering team with 3D printer research and development, assembly, and optimization utilizing SolidWorks, Autodesk Meshmixer, PrucaSlicer, and finite element analysis.

Research, UF Nanostructured Energy Systems Lab

Mar 2023 – present

- Assisting a team with postdoctoral research.
- Tuning ionic liquids for CO₂ and absorption utilizing the COSMO-RS (COnductor like Screening MOdel for Real Solvents) method, with the goal of making carbon capture machines more effective.
- Testing novel ionic liquid and water mixtures via a custom designed heat exchanger for temperature change induced phase separation to improve machines involving water absorption, such as dehumidifiers.

Skills

- Dedicated to learning and am a fast learner
- Motivated to make a positive difference
- Problem solving under pressure
- Proficiency in spoken and written Mandarin Chinese (5 years of knowledge)
- Certified in SolidWorks and proficient in MATLAB