

Alejandro Turnbull

Undergraduate Physics Student

I'm a second-year Physics undergraduate with an focus in space science and engineering, and strong interests in politics, and history. I'm passionate about learning and sharing my knowledge with others.

@ otl013825@gmail.com
+01 949 435 9030

@ aturn042@ucr.edu
Riverside, California

SKILLS

3D Printing
CAD

Composite Materials
Communication

Cross-Team
Collaboration

Teamwork
Project Management

Leadership
US Citizen

EDUCATION

B.Sc. Physics Candidate

University of California, Riverside 2024 – 2028 (expected) Riverside, CA

• Curriculum: Applied Engineering Physics

EXPERIENCE AND EMPLOYMENT

Dr. Shawn Westerdale Lab

UC Riverside Oct 2024 – Present Riverside, CA

Keywords: *cryogenic systems, particle astrophysics, dark matter, WIMPs*

- Developing cryogenic fluids systems for dark matter direct detection
- Increasing knowledge of physics research practices and particle astrophysics/multi-messenger astronomy techniques.

Dr. Dave Reinkensmeyer Lab

UC Irvine Jun – Aug 2023 (7 weeks) Irvine, CA

Keywords: *biomechatronics, 3D design, mechanical engineering, bioengineering*

- Learned 3D design and manufacturing techniques
- Developed hardware for AirStep, a device to promote gait recovery in spinal injury patients
- Conducted research for alternate, space-related applications for AirStep

Villa Philmonté Tour Guide

Philmont Scout Ranch Jun–Aug 2025 (7 weeks) Cimarron, NM

Keywords: *public speaking, historical interpretation, collection care, museum operations*

- Engaged visitors about the history and significance of the National Register of Historic Places-listed Villa Philmonté
- Honed presentation and communication skills
- Conducted historical research to enhance presentation abilities

Paid Canvasser

Mike Levin for Congress May – September 2024 (16 weeks) Carlsbad, CA

Keywords: *public speaking, voter contact, campaign*

- Contributed to successful reelection effort of US Representative Mike Levin
- Leveraged engineering skills to improve operations

OTHER ACTIVITIES AND PROJECTS

High Power Rocketry

From 2023 – NAR Level 2

Highlander Space Program

From 2024 – Airframe Systems Engineer, leading development on TANGERInE, a high power, liquid fuel test rocket

Astronomy Club

Since 2024 – telescope operator

Space Scout - Writer

Since 2024 - writing space news coverage for Space Scout

AWARDS AND CERTIFICATIONS

Eagle Scout

Highest award of Scouting America.
Fewer than 4% of Scouts attain Eagle.

NAR Level 2 Certified

Certified to purchase and launch rocket motors containing up to 5120N-s of total impulse.

PADI Open Water Certified

Certified to SCUBA dive with a buddy in open to depths up to 18 meters.