

Samuel Moss

Date of birth: 09/05/2005 | **Nationality:** American | **Phone number:** (+1) 8018576291 (Mobile) | **Email address:** mobodawn123@gmail.com | **Website:** samueljmoss.com

EDUCATION AND TRAINING

25/09/2023 – CURRENT Pasadena, California, United States
BACHELOR OF SCIENCE - MATHEMATICS California Institute of Technology

Level in EQF EQF level 6

13/08/2019 – 02/05/2023 Orem, Utah, United States
ASSOCIATE OF SCIENCE - UNIVERSITY STUDIES Utah Valley University

- Completed during high school

Level in EQF EQF level 5

WORK EXPERIENCE

STACK TEACHING ASSISTANT – CALIFORNIA INSTITUTE OF TECHNOLOGY – 26/09/2026 – Current – PASADENA, CALIFORNIA, UNITED STATES

- Designed problems using the STACK software for Caltech Ma 1b practical (linear algebra), 5 hours per week.

RYSER SURF (SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP) FELLOW – CALIFORNIA INSTITUTE OF TECHNOLOGY – 20/06/2026 – 29/08/2026 – REGENSBURG, GERMANY

- Mentored by Denis-Charles Cisinski (Universität Regensburg Professor of Mathematics).
 - Email: denis-charles.cisinski@ur.de
- Worked on improving and reproving basic results on noncommutative motives for additive and localizing invariants in Cisinski's synthetic category theory framework.

UNDERGRADUATE TEACHING ASSISTANT – CALIFORNIA INSTITUTE OF TECHNOLOGY – 24/03/2026 – 06/06/2026 – PASADENA, CALIFORNIA, UNITED STATES

- Teaching assistant for Caltech's Ma 108c (undergraduate complex analysis), 10 hours per week.
- Hosted weekly office hours to help students with problem sets and understanding concepts.
- Graded and provided feedback on submitted problem sets.

SURF (SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP) – CALIFORNIA INSTITUTE OF TECHNOLOGY – 17/06/2024 – 31/08/2024 – SPANISH FORK, UTAH, UNITED STATES

- Mentored by Aravind Asok (University of Southern California Professor of Mathematics).
 - Email: asok@usc.edu
- Developed Hodge-theoretic techniques for formulating an algebro-geometric variation of the s-cobordism theorem.

UNIVERSITY PEER ACADEMIC COACH – CALIFORNIA INSTITUTE OF TECHNOLOGY – 28/09/2024 – Current – PASADENA, CALIFORNIA, UNITED STATES

- Provide individual tutoring services for Caltech students for Ma 1abc (proof-based calculus, linear algebra, and multivariable calculus), Ma 5abc (undergraduate abstract algebra), Ma 108abc (undergraduate analysis), Ma 109abc (undergraduate topology and geometry), Ma 120abc (graduate abstract algebra), and Ma 151ab (graduate algebraic topology).
- Sessions are focused on developing, understanding, and practicing concepts from class.

- Hosted weekly sessions to help freshmen understand concepts for Caltech Ma 1abc (proof-based calculus, linear algebra, and multivariable calculus)
- Provided hints and insights for thinking mathematically and solving problems in Caltech Ma 1abc.

MARK REINECKE SURF (SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP) FELLOW – CALIFORNIA INSTITUTE OF TECHNOLOGY – 19/06/2024 – 31/08/2024 – PASADENA, CALIFORNIA, UNITED STATES

- Mentored by Matthew Gherman (Caltech Assistant Teaching Professor in Mathematics)
 - Email: mgherman@caltech.edu
- Extended Professor Gherman's results in negligible cohomology by developing a theory of negligible thresholds.
- Continued this research unfunded during sophomore and junior years of Caltech.

● **HONOURS AND AWARDS**

26/05/2026

H. J. Ryser Scholarship – California Institute of Technology

- Awarded to undergraduate students for academic excellence.

27/05/2025

Morgan Ward Prize – California Institute of Technology

- Awarded jointly with Eduardo Nascimento for submitting original research on negligible group cohomology for profinite groups.

● **CONFERENCES AND SEMINARS**

03/01/2026 – 06/01/2026 Washington D.C., United States

Joint Mathematics Meetings (JMM) 2026

21/11/2024 San Bernadino, California, United States

Southern California Conference for Undergraduate Research (SCCUR) 2024

● **SOCIAL AND POLITICAL ACTIVITIES**

20/09/2026 – CURRENT

Caltech Math Club President

- Planned and lead club meetings.
- Filled out club paperwork.
- Delegated responsibilities to other club members when appropriate.

28/09/2025 – 11/06/2026 Pasadena, California, United States

Caltech Math Club Vice President

- Met with Caltech faculty to arrange math talks aimed at a general audience.
- Planned dates, times, topics, and logistics of these talks.