# **Tiancheng Shao**

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#### **EDUCATION**

#### University of California, Los Angeles, Los Angeles, CA

Sep 2025-Expected Jun 2029

Candidate for Bachelor of Science, Business Economics

Relevant Coursework: Microeconomic Theory, Principles of Accounting

#### Montgomery Blair High School, Silver Spring, MD

Aug 2021-June 2025

Science, Mathematics, Computer Science Magnet Program

GPA: 4.9

SAT score: 1580; Writing: 390 Math: 790 Critical Reading: 400

Relevant Coursework: AP Macroeconomics (5), AP Microeconomics (5), AP Statistics (5), Analysis of Algorithms, Algorithms and Data Structures

#### **EXPERIENCE**

## NASA Goddard Space Flight Center | Research Intern, Greenbelt, Maryland

Jun 2024-Aug 2024

- Led independent analysis of May 2024 solar storm, using Linear Regression and LSTM Artificial Intelligence models
  to predict proton and electron flux. Discovered another radiation belt between inner and outer Van Allen belts.
- Presented results to peers and senior scientists at the 2024 American Geophysical Union (AGU) meeting.
- Shared research with 25,000+ global attendees.

#### CISESS at University of Maryland | Research Intern, College Park, Maryland

Jun 2023-Aug 2023

- Built TensorFlow U-NET model for satellite image segmentation to track Iceberg A73 over 700+ Kilometers
- Automated iceberg size, rotation, and location metrics using OpenCV computer vision.
- Presented findings at the 2024 American Meteorological Society (AMS) Meeting.

#### Department of Astronomy University of Maryland | Research Intern, College Park, Maryland

Jul 2022-Nov 2022

- Developed LSTM models predicting Disturbance Storm Time (Dst) indices by integrating WIND satellite and ground observatory data.
- Predicted Storm Intensity within 98% accuracy with 8-hour advance warning.

### **EcoMoco Student Organization** | *Executive Board Member*, Rockville Maryland

Aug 2024-Jun 2025

- Led website redevelopment for ecomoco.com, a student environmental organization with 217 members.
- Worked with other board members to plan 100+ projects impacting 10000+ people

#### MBHS Math Team | Content Team Leader, Silver Spring Maryland

Aug 2023-Jun 2025

- Worked with 9 team members to overhaul meeting structures, focusing on interactivity and meeting attendance.
- Researched, wrote, and presented lectures to over 100+ members of Math Team.

## **Projects**

## **DECA VBC** | Competitor

Jan 2024-Feb 2024

• Built an automated advertising budget system using PyAutoGUI, PIL, and OpenCV. Optimized audience targeting from simulated poll data with Excel.

## tanchan.xyz | Personal Website

Jan 2024-Feb 2024

• Built websites including portfolio and web games using frontend tools like HTML, CSS, Javascript, React, and Tailwind. Over 1.8k unique visitors per month.

#### **AWARDS + HONORS**

• International Finalist for Accounting Applications (DECA ICDC, Top 10 of over 150 qualifiers)

2024, 2025

ExploraVision Semifinalist (Toshiba/NSTA STEM Competition, 100 out of 1000)

2024

• Non-Trivial Fellowship Finalist (National Research Fellowship Program, 500/10000)

2024

#### **SKILLS**

Technical: Microsoft 365, Python, R, Java, SQL, PowerShell, Tensorflow, Frontend, Accounting

Interests: Making websites, Playing guitar