

Uncrewed Aerial Systems @ UCLA

## UASATUCLA

### **SPONSORSHIP PROPOSAL**



## FROM THE EXEC'S DESK

Dear prospective sponsor,

I am Kush Agarwal, president of UAS@UCLA for the 2024-25 school year. I want to extend our deepest gratitude on behalf of our executive community and our team for making time to read our proposal and considering partnering with us. We are UCLA's premier aerial robotics team with years of experience with autonomous drones and planes. Our technical subteams cover various aerospace, mechanical, electrical and computer science disciplines. We design our frames, create and maintain software for communication, develop algorithms for target detection and identification, create mechanisms for various in-air missions and a lot more. Our growing team of UCLA undergraduates help us propel us to achieve our goal every year.

This year, we aim to train new members, develop deeper connections with the industry, and conduct technical workshops and social events in a bid to equip our members with valuable skills and resources which would be helpful when they set foot in the industry. To help achieve our goals, we would deeply appreciate any monetary or material help. This document outlines some of the work we do and our upcoming plans. We would love to connect with you to explore more ways in which you can help us.

Regards,
UAS@UCLA Executive Committee



#### **PRESIDENT**

Kush Agarwal & kushhansagarwal & gmail.com

#### **VICE PRESIDENT**

Nathan Chan nathanchan@gmail.com

#### **CHIEF TECHNOLOGY OFFICER**

John Nitsos johnnitsos@g.ucla.edu



## MEET THE TEAM



UAS is a diverse organization with people of all years and various engineering disciplines, which provides opportunities for our members to develop their skills in an intersectional context. UAS has experience building large-scale drones for both mission-driven competitions as well as for grant-funded research projects, many of which involved autonomous flight. From manufacturing carbon fiber airframes, writing and testing new flight control software, fabricating drones of all sizes for different applications, UAS provides the means to explore all aspects of aerial robotics and to challenge today's limits on the capabilities of drones.



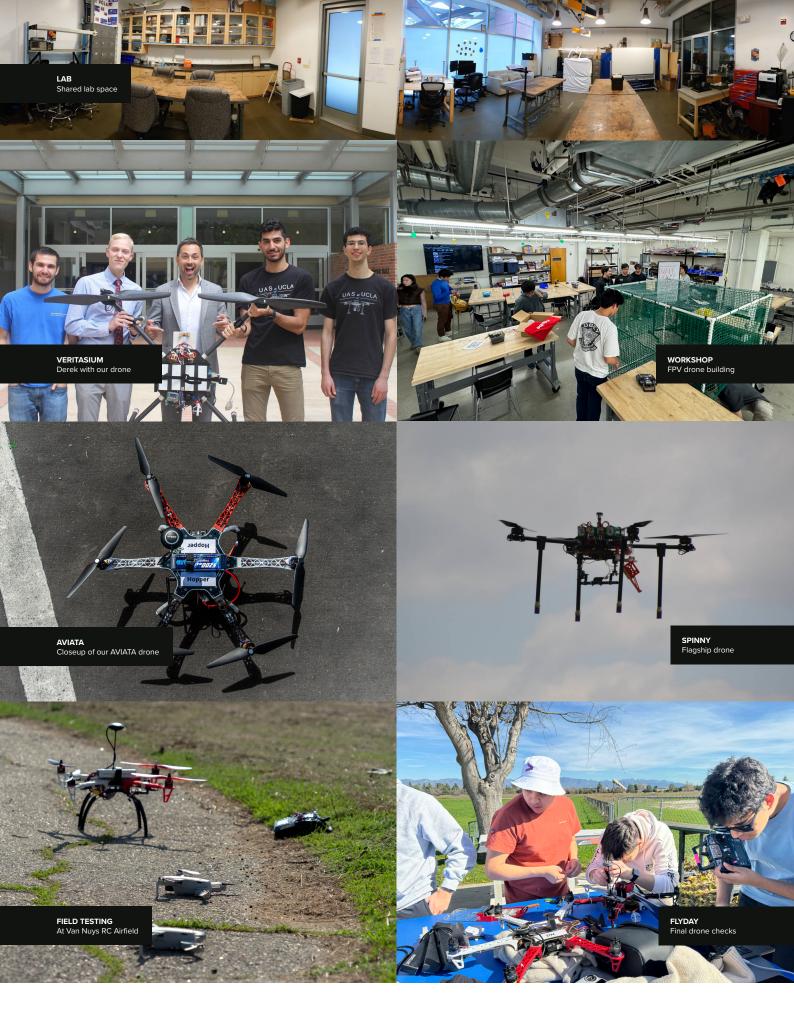
### WHAT WE DO

Uncrewed Aerial Systems (UAS) is the premier undergraduate aerial robotics team at UCLA. Our student team is involved in the full system development process of building drones, from initial design to prototyping, manufacturing, and flying them. UAS is a diverse organization with people of all years and various engineering disciplines, which provides opportunities for our members to develop their skills in an intersectional context. UAS has experience building large-scale drones for both mission-driven competitions as well as for grant-funded research projects, many of which involved autonomous flight. From manufacturing carbon fiber airframes, writing and testing new flight control software, fabricating drones of all sizes for different applications, UAS provides the means to explore all aspects of aerial robotics and to challenge today's limits on the capabilities of drones.

UAS has also worked on AVIATA, a system capable of carrying payloads in the air indefinitely. To do this, we used a drone swarm to hold a central frame supporting the payload, allowing us to swap individual drones in and out whenever they run low on battery. Our proposal had been accepted by the NASA Aeronautics Research Mission Directorate (ARMD) in the University Student Research Challenge (USRC). The upcoming year, we plan to engage in similar research projects, working on harnessing and implementing cutting edge drone technology in different and unique use cases. Led by a team of passionate drone enthusiasts, we hope to introduce everyone to the exciting world of drone technology. Uncrewed Aerial Systems (UAS) is the premier undergraduate aerial robotics team at UCLA. Our student team is involved in the full system development process of building drones, from initial design to prototyping, manufacturing, and flying them.











## UPCOMING PLANS

UAS is continuing to look towards growth, expanding both our technical prowess and professional development. For the upcoming year, the organization is looking to introduce more workshops and training programmes to increase membership and growth. This would be accompanied by research projects aimed at specific disciplines such as hardware, computer vision, autonomous vision and more, which would help new members go on a self-guided journey to learn and explore nuances of drone technology. We aim to use this experience from new members and the existing team to compete in the 2025 AUVSI SUAS competition. We also hope to work closely with AIAA to conduct more industry and professional events, in a bid to help members not only gain technical expertise but also connect with individuals in one of the most rapidly growing industries. We already have plans for career fairs, alumni talks, info sessions, collaborations with other UCLA and LA clubs and panel discussions to help the aerospace engineering community at UCLA.

EXPENDITURE	AMOUNT
AUVSI SUAS	\$3000
Member Training & Workshops	\$3000
Research	\$5000
Laboratory	\$3000
Total	\$14000



# SPONSORSHIP DETAILS

#### GOLD (\$2000+

#### **BRANDING**

Social Media Shoutouts Logo on Website Logo on Slides Logo on Merchandise Logo on Drone

#### **RECRUITMENT**

Project Updates Meet and Greet Priority for Info Sessions/Tours Request Member Resumes Distribute Recruiting Material

#### SILVER (\$1000-\$2000)

#### **BRANDING**

Social Media Shoutouts Logo on Website Logo on Slides Logo on Merchandise

#### **RECRUITMENT**

Project Updates Meet and Greet Priority for Info Sessions/Tours Distribute Recruiting Material

#### BRONZE (\$500-\$1000)

#### BRANDING

Social Media Shoutouts Logo on Website Logo on Slides

#### RECRUITMENT

Project Updates Distribute Recruiting Material

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Your donation will be processed by the UCLA Foundation, which oversees funds from various contributors for on behalf of UCLA's departments and clubs. For more information on fund management, please refer to this link for more details.

https://www.uclafoundation.org/Resources/Disclosures

Additional documents and resources you may need can be located here:

https://www.uclafoundation.org/Resources/Tools

Since we hold 501(c)(3) status, donations made to us are tax deductible.

For donation related inquiries and sponsorship form (including requests to make material donations), contact our treasurer Alex Thaik (<u>uas@g.ucla.edu</u>)



