ACM 2019-2020 Student Chapter Excellence Awards Application

For Application Guidelines, see https://www.acm.org/chapters/student-chapter-excellence-awards

Award Category: Outstanding School Service

Chapter Name: *

UCLA ACM Student Chapter (90844)

City: *

Los Angeles

State/Province:

California

Country: *

United States of America
Please provide all required information

URL for your Chapter homepage: *
For example, https://www.acm.org

http://acm.cs.ucla.edu

Facebook:

https://www.facebook.com/uclaacm/

Who is submitting this application? *
Enter Submitter's name

Kevin Tan

Submitter's Email: *
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Faculty Sponsor Name: *

David Smallberg

Faculty Sponsor Email: *

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Outstanding School Service: Chapter Achievements

Provide brief descriptions as requested, and stay within the character limit for each

Please provide a brief description of your chapter and school (1500 character maximum) *

"UCLA Samueli is a tightly knit community of 180 full time faculty members, 3,500 undergraduate and 3,000 graduate students, and 40,000 active alumni. Known as the Birthplace of the Internet, UCLA Samueli is also where countless other fields took some of their first steps – from artificial intelligence to reverse osmosis, from mobile communications to human prosthetics. We are consistently ranked in the Top 10 among U.S. public engineering schools." (https://samueli.ucla.edu/samueli-school-story/)

Our chapter, UCLA ACM has grown to be one of the largest student-run tech organizations in Southern California with over 700 members and is organized into 8 sub-groups:

ACM AI: To nurture curiosity in artificial intelligence and machine learning
ACM Studio: To create a community for developers interested in game development and virtual reality
ACM ICPC: To promote critical thinking and problem solving through practice and participation in programming competitions
ACM Hack: To empower UCLA students to influence their world through code by teaching them mobile and web development
ACM-W: Advocates for the full engagement of all who are interested in CS and aims to increase diversity in the technical field
ACM Cyber: To teach students the importance of cybersecurity through exploration of cryptography, web hacking, and other related topics
ACM TeachLA: To give elementary and middle school students access to CS education
ACM Design: To foster a community passionate about design
As the largest CS organization at UCLA, ACM at UCLA bridges communication between students and the UCLA CS department. Every year, we release surveys to obtain feedback from students and host a Computer Science Town Hall, where we aim to facilitate a safe space for faculty and students to discuss any concerns or feedback they may have about our CS program.

Through our efforts to combat the low retention rates of introductory CS classes (taught in C++), a pre-introductory course taught in Python was tested and officially added to our CS curriculum as an optional class. We pushed for a Learning Assistants program that let undergraduate students teach their peers. While these changes were introduced last year, we've begun to see increased adoption from freshmen students, as well as more transparency and attendance at student and professor events (townhall attendance increased from ~30 to >120).

We have also played a significant role in improving and updating courses. These include: removing restrictions on CS electives and a Physics lab from curriculum requirements, and continuing to add electives such as Distributed Systems and Natural Language Processing.

Most recently, we have aggregated student feedback to advocate for an opportunity to learn relevant industry technologies such as React at the lower-division level. We have worked with the Computer Science department to develop CS 97: Software Construction Projects, an experimental class being offered this Spring. The class will feature an open-ended full-stack project in teams that will help students learn software construction processes such as version control and leave the class with a resume-worthy app.

In the spring, we also co-host the “Women in Engineering Stayover Program” (WESP) for UCLA Engineering women admits. For a weekend, current students host prospective students in UCLA dorms to give them a taste of the UCLA experience and attend a variety of fun activities such as a scavenger hunt with them. By creating a welcoming atmosphere, WESP has led to better retention rates of admitted women to UCLA Engineering and contributes to our increased diversity. We also co-host “Empower Week”, a series of events during the week of International Women's Day to help strengthen the community of women engineers at UCLA.

One of our major areas of service to the UCLA community is in our quarterly technical bootcamps that are taught by our own officers over the span of 8 weeks. Our programs for the 2018-19 school year include (not a complete list):

- Hack School (attendance: 120) and Hack Sprint (100, 6 teams): Our 8-week certificate program for learning Frontend and Backend Web Development (Javascript) and iOS.
- Game Development with Unity (60): Weekly workshop series in learning to how to create 2D and 3D games.
- Machine Learning Workshops: Beginner (attendance: 150), Advanced (70), and Advanced++ (10): We offer multiple weekly workshops of varying levels on AI/ML topics, from linear regression to neural networks.

This year, we created a new track system to create tailored workshops for different attendee experience levels.
- ICPC Project A* Training Sessions (60): A weekly algorithm academy with lectures on different algorithm topics followed by practice contests. Officers help through debugging and pair programming.
- Intro to Web Hacking Workshops (70): A workshop series to introduce beginners to web security, teaching them how to find and exploit vulnerabilities in web applications and taking them step by step through the hacking process.
- Hack on the Hill (200): A beginner friendly Hackathon that we host to provide an environment where people can explore their interests and build something within 14 hours with the help of mentors.

Through our programs and contributions of service, ACM at UCLA has helped to improve and benefit the student community and the university.

All of our workshops’ resources are hosted online on GitHub: https://github.com/uclaacm

This form was created inside of Association for Computing Machinery.