

January 28, 2022

Arizona State University  
SCALE Research  
Tempe, AZ 85281

Dear Hiring Manager,

I am interested in the SCALE research program because I have been working with integrated circuit applications for the last two years both in industry and in extracurricular organizations, and I would like to get involved in research to open up more opportunities to work with these devices at a more technical level. With the growing demand for semiconductor devices and recent movements to bring more semiconductor manufacturing to the US in response to the global chip shortage, I think a strong background in microelectronics would set me up for lots of interesting career paths in the future. I have particularly enjoyed my coursework in digital circuits, so I would love to get involved in a research project that would allow me to apply this knowledge. I am excited by the opportunities the program affords student researchers, such as special topics courses, seminars, and the potential to work on a focused senior design project. Of the research areas that ASU participates in, I believe the area of heterogeneous integration is the most inline with my current interests, although I am very open-minded to other research opportunities that may present themselves. I believe I possess several qualities that would make me an effective researcher; the following are a few illustrative examples:

- **Leadership:** As president of a student organization, I have been responsible for managing the activities of several project teams, scheduling consistent club meetings, and providing guidance and mentorship to newer members of the organization. I have several years of experience working with engineers of all different backgrounds and technical interests, so I have learned how to effectively manage large teams of engineers where each individual has their own priorities and availability.
- **Communication:** Having worked with engineers from different technical backgrounds, I have had to learn to focus on my communication skills to accurately and succinctly convey my ideas in order to work with my team members. Additionally, I work with students of all levels of technical experience, so I have also learned to cater my presentation to the experience level and background of the audience.
- **Time Management:** As an active member of a student-led organization, I have to be motivated to make time for my projects each week. With a busy school schedule, this has forced me to become effective at time management. I have learned to plan my workload for efficiency, and to set aside time each week for my projects. Additionally, I have been responsible for scheduling club events, which has required me to learn to plan my schedule weeks ahead of time.

Thank you for taking the time to consider my application, I look forward to hearing from you. Please feel free to contact me by phone at 404-430-1346, or by email at [cacost12@asu.edu](mailto:cacost12@asu.edu).

Sincerely,  
Colton Acosta