

Undergraduate Research and Internship Opportunity
Research and Development of 5G New Radio Control Channels
January-September 2020

We are excited to announce an opportunity for two UCLA undergraduates to participate in research in Professor Wesel's Communications Systems Laboratory during winter and spring quarters of 2020 followed by a summer internship at Zeta Associates in Colorado.

Working as a team, two UCLA undergraduates will use a software radio environment provided by Zeta Associates to compare the complexity and performance of polar codes and convolutional codes on 5G control channels or other aspects of 5G. The research team will be supported in their efforts by Prof. Wesel, graduate and undergraduate students in the Communication Systems Laboratory (CSL), and engineers at Zeta Associates. The work will begin at UCLA in the CSL during winter and spring quarters and continue during the summer at Zeta Associates facility in Aurora Colorado. Pay is \$22/hour for winter and spring research at UCLA and higher while at Zeta Associates. Students will report progress weekly at the CSL research meeting and give formal quarterly presentations to the CSL and to the Zeta management team.

The preferred skill set includes the ability to work well on a team as well as proficiencies in C++ (CS31), probability (ECE 131A), and communications systems (ECE 132A).

More information about the CSL can be found at <http://www.seas.ucla.edu/csl>.

More information about Zeta Associates can be found at <https://www.zai.com>.

Applications should send a resume and cover letter to Professor Wesel at wesel@ucla.edu with the subject line "5G software radio CSL/Zeta research and internship program." Applicants should be ready to commit to the full 9-month experience. Applications due Friday November 20 with candidates selected for interview announced Friday December 4.