Undergraduate Research Assistant Opportunity within the UW CEE RAPID Facility

CEE's own UW RAPID Facility is recruiting for one undergraduate research assistant (URA) for the summer of 2022. The appointment will be for 40 hours per week, will start as soon as possible after June 17, and will continue through mid-September. Job responsibilities include supporting RAPID facility staff on data-collection deployments across the country, basic field data management and processing, equipment maintenance, and fabrication of new instrumentation. The successful applicant will i) be highly motivated for self-directed learning, ii) demonstrate an aptitude for problem solving and exceptional organizational techniques, iii) be professional and adhere to the RAPID Facilities code of conduct, iv) be capable of working with and receiving feedback from a team, v) have basic computing skills, vi) show the ability to support field operations that require: 1) carrying modestly heavy equipment (up to 35 lbs) over modestly rough terrain for distances up to a mile, and 2) traveling and operating equipment during long days, vii) interest in advancing natural hazard research field data collection via the activities discussed in detail below, and viii) availability to work the entire week of July 25-29, 2022. This appointment will be paid at \$17.27 per hour.

If you are interested in this opportunity, by Start of Business, Monday, June 13, 2022, email the RAPID team (rapidreu@uw.edu) a PDF of your resume, unofficial undergraduate transcript, and a short (less than 200 words) statement about why you are a good fit for this opportunity. Applications will be accepted after June 13 2022; however, application review will begin on June 14, 2022.

Additional information about the RAPID facility and job activities are discussed below.

The NSF-sponsored UW RAPID facility provides researchers with the equipment, software, and support services needed to collect, process, and analyze perishable data from natural hazards events such as earthquakes, hurricanes, tsunamis, landslides and wildfires. Facility equipment includes ground-based laser (lidar) scanners, GNSS and surveying equipment, streetview style imaging systems, uncrewed aerial systems (UAS) with digital cameras and/or lidar units, accelerometers, and seismometers for ground

investigation as well as software to support data processing (E.g., Pix4D, Leica Cyclone suite, Maptek Pointstudio). Additional information about the RAPID facility is available at https://rapid.designsafe-ci.org/.

URAs will work primarily with RAPID staff members Dr. Michael Grilliot, Andrew Lyda, Jaq Zdebski and Karen Dedinsky. Activities will include the following:

- 1. Learning proper care and maintenance procedures for RAPID equipment and inventory.
- 2. Maintaining a clean and safe workspace in the RAPID occupied spaces within More Hall
- 3. Assisting RAPID staff prepare for and return from field deployments, including developing packing lists, establishing deployment schedule, packing/unpacking equipment.
- 4. Assisting RAPID staff and researchers with field deployments, including travel to/from deployment site, equipment setup and testing, data collection, and data evaluation and management in the field. URAs will be trained to use specific equipment and will have the opportunity to support staff with data collection.
- 5. Supporting pre- and post-deployment data management, and post-processing of collected data.
- 6. Train and then construct new sensors for field measurement of water depth.