

Lindsey Kim '24

Internship at KAIST University
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During my internship with Professor Cha at KAIST University in Daejeon, South Korea, I used my skills in mathematics and computer science to develop a fuzzing competition and open-source platform in order to create standardized fuzzing benchmarks and performance analytics to evaluate new fuzzer technology. I primarily worked on creating a new and adaptable lexer and parser language that could be used to accommodate dynamic test cases and could act as the standard for all inputs. During this internship, we did research into various fuzzers such as AFL, Google OSS-Fuzz, etc., and we also looked at various dynamic benchmarks such as networks and GUI programs. Similarly, we studied different approaches to synthesizing buggy programs as fuzzer inputs. We also studied different programming languages such as Rust, ocamllyacc, and ocamllex, and developed a prototype for our own input language that could be used to synthesize fuzzer input for our fuzzing competition.