Open Source Software DeveloperRemoteVideoLAN Org./Google Summer of CodeJun 2020 – Sep 2020 Selected among 9000+ applicants (~13.4%) in GSoC 2020 Open Source program; Made VLC Media Player accessible via remote command line access or Android apps (MPDroid), contributions merged upstream. Developed a multi-threaded MPD server as an OS level control module in C/C++ using POSIX threads and Socket Programming to handle 100+ concurrent client requests over a local network. Integrated the server with core VLC API to enable remote queries for playback control and media management. Reduced C++ network latency by ~ 40% and unit-tested modules for concurrency, file handling, and synchronization.

Software Engineering InternBangalore, IndiaSamsung R&D InstituteJan 2020 – Jun 2020 Developed network logger tool for codebase migration from 3.95G to 4G and automation scripts for 85+ network simulations for real time monitoring of metrics like SNR, latency & packet loss. Reduced simulation time by implementing parallelization and multi-core support, speeding up checks by 25%. Led an intern team to develop and integrate a React dashboard to monitor above changes and visualize KPIs.