

EECS 678: Lab 8 - Function Pointers

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Program, Data Structure, and Compare Function architecture.

The implementation for the function pointer lab includes, in order, instantiation of an array of job structures, execution of qsort based on arrival criteria, and execution of qsort based on priority-arrival criteria as per the laboratory assignment description.

The Job structure contains three integer values titled `jid`, `arv`, and `pri` which correspond to job ID, arrival time, and job priority (As mentioned above this array is instantiated and populated at the beginning of execution). The two compare functions are nearly identical in logical structure.

The `arrival_sort` comparison function, as per the qsort requirements, takes two void pointer arguments casts them into job structs and then returns the difference between the first and seconds arrival time. Similarly, the `priority_sort` function returns the difference between the first and second arguments priority value, and calls `arrival_sort` if the values are equivalent. The remaining logic in `main()` handles qsort invocation and the display of the resulting sorted array.