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Skill

C, Linux embed, Linux Kernel Development

Projects

A Weighted Round Robin Scheduler in Multicore System

Tested on Samsung Artik10 as default scheduler for kthread and swap in replace of Completely Fair Scheduler.

Implement load balancing between 8 cores.

Rotation based Read-write Lock for ARTIK10

A read-write lock based on rotation information from device.

Synchronize with spinlock and conditional variables.

Manage waiting list with linux circular list.

SnuPL/1 Compiler

SnuPL1 consists of scanner, parser, semantics checker, code generation and support composite data type arrays.

Implemented in C++ the compiler will compile SnuPL/1 source code into 32-bit Intel assembly code.

SNU Source Code Plagiarism Detector

Extract Abstract Syntax Tree(Ast) from gcc for C programs.

Apply Tree Edit Distance algorithm to compare distance between two Asts.

Visualize plagiarism result with Graphviz and Neo4j