Gao Zhiyuan

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Computer Science and Engineering

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Education

B.S. Political Science, National Cheng Kung University, 2015.

B.S. Engineering Science, National Cheng Kung University, 2017.

B.S. Computer Science and Engineering, Seoul National University University, 2017.

Skills

C, Linux, python3, Git

Projects

Weighted Round Robin Linux Scheduler for Multicore System

A weighted round robin scheduling class with SMP support.

Load balancing is provided to balance multicores.

SnuPL/1 Compiler

SnuPL1 is a procedural language related to Oberon programming language. SnuPL/1 supports conditional expressions, IO, string, arrays, etc..

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

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.

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

Activities

Devotee in Open Source: Speaker at OpenSUSE Asia Summit 2017, founder of student open source community in Taiwan

Proficient in English and Japanese