

HYUN SOO JEON

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EDUCATION

Columbia University

New York, NY

Bachelor of Arts: Computer Science; GPA: 3.62, Dean's List

May 2020

Relevant Coursework

- Operating Systems, Networks, Design Using C++, Advanced Programming in C, Distributed Systems, Cloud Computing & Big Data, Databases, Programming Language & Translators, Data Structures, Artificial Intelligence, Computer Vision, Natural Language Processing

Westchester Community College

Valhalla, NY

Associate of Science: Journalism; GPA: 3.91, President's List

May 2018

SKILLS & TOOLS

Computer Skills: C, C++, Makefile, Git, Python, Go, OCaml, Linux/UNIX, DBMS/SQL/PostgreSQL, Networks, GCP, AWS

Languages: English, Korean

PROJECTS

Synchronizer on Android Emulator (C)

- A new kernel synchronization mechanism that allows multiple processes to block on a rotation event until the emulator exceeds a certain rotational speed
- The device rotation state is accessed via an on-board gyroscope that reflects the rotational speed around X, Y and Z axis of the device, which is in turn polled by a daemon process that updates the device rotation state
- To be resistant to noise, the kernel records N rotational samples; only when n out of N samples exceed the threshold, the event is triggered

Scheduler (C)

- A default Weight Multicore Round-Robin Linux scheduler that supports multiprocessor/uniprocessor systems
- Assigns the task to the CPU with the least total weight among all CPUs
- Fully supports load-balancing; an idling CPU pulls tasks from other working CPUs if it is eligible to be moved

TCP Server (C++)

- A web server that implements a subset of HTTP 1.0, and that handles GET requests for static content
- The web server maintains a persistent TCP connection to a lookup server
- Providing an HTML front-end to the lookup server, the server returns dynamic content, specifically lookup records formatted in an HTML table

Bash Shell (C++)

- Modeled after Bash Shell, it runs continuously and displays a prompt when waiting for input
- The shell remembers the last 100 commands the user ran successfully, and auto-suggests commands for an invalid command
- Augmented to be capable of executing a sequence of multiple programs, it allows for communication between the programs through a pipe

Where's Waldo? (Python)

- A convolutional neural network model that finds Waldo
- Trained on 18 images by highlighting Waldo in a square filled with 255, and filling 0 for areas outside the square

EXPERIENCE

Westchester Community College – Valhalla, NY

July 2017 to July 2018

Teaching Assistant: Data Structures in C++, Calculus, Physics

- Promoted deeper learning by providing individualized and small group support to reinforce classroom topics

The Korean National Police Agency – Seoul, South Korea

July 2010 to May 2012

Auxiliary Police Officer

- Provided all policing services throughout the capital city of South Korea, Seoul