Chun Hin Chan

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Ambitious student with great problem-solving and organization skill. Extensive knowledge in several programming languages.

Skills

- Solid understanding in programming languages including: C, C++, Java, Python, R, Matlab, HTML5, CSS, JavaScript.
- Fluent in English, Cantonese, and Mandarin. Proficient in Japanese.
- Ability to solve problems with minimal help
- Highly organized and structuralized workflow

Projects

DEC 2018 – CURRENT

Personal Website w/ HTML5, CSS, JS

- Compiled using mostly React.js and hosted by Github Pages, chnchan.github.io.
- More information about me and my work can be found there.

SEP 2019 – SEP 2019

Space Invader w/ Python3

- Developed using the PyGame module
- A simple Space Invader game with some element of Bullet Hell.

Coursework

MAY 2019 – JUN 2019

Lango, the flashcard web app w/ HTML5, CSS, JS

- Implemented using Node.js, React.js, SQLite3, Google's Cloud Translation API and OAuth2 API 2.0.
- Users will be able to create flashcard by typing in vocabulary in English and save it to the server's database. Each user will be assigned with a user identification code on their first login such that only the person creating the flashcard will have access to that flashcard. This process happens seamlessly and automatically in the background.

MAR 2019 – APR 2019

Seam Carving w/ Matlab

- Implemented the content-aware image resizing algorithm - Seam Carving.
- Compared with the standard image resizing method and identify the strength and weakness of Seam Carving. A portion of the program write-up is reserved to discussed how some of these weakness (ex. faces) can be avoided.

APR 2019 – APR 2019

Image Stitcher w/ Matlab

- Prompt users to identify the matching features of the two images. The program will then calculate the homographies and apply linear transformations to one of the images. When merging the two images, inverse wrapping will be used to ensure a hole-less and preserving image.

JAN 2019 – JAN 2019

Simple Shell w/ C

- Recreated a simpler version of the UNIX shell.
- Create sub-processes to run the users' command using fork().
- Implemented redirection (< and >) and pipeline (|)

JAN 2019 – FEB 2019

Thread API w/ C

- Recreated functions from the POSIX Threads API.
- Implemented preemption such that each progress gets equal amount of CPU time.

FEB 2019 – FEB 2019

File System API w/ C

- Updated and maintained information on a virtual disk in superblock, file allocation table, and root directory (the virtual disk is a binary file we used to simulate a real file system).

NOV 2018 – DEC 2018

3-Dimensional Projection System w/ C++ (OpenGL)

- Rasterized triangle meshes using Gourand shading and painter's algorithm.
- Simulated light using Phong lightning model.
- Simulated different brightness level on binary display device using half-toning.

Experience

FEB 2019 – JUNE 2019

Tutor / Woodland Senior High School

- Maintain and organize students' data in a systemically fashion.
- Collaborate with teachers and fellow tutors to improve students' academic performance.

Education

EXPECTED GRADUATION: JUNE 2020

Bachelor of Science, Computer Science / UC Davis

- GPA: 3.581 / 4.000 (Upper Division GPA: 3.711 / 4.000)