Taher Jafferjee

Github://rehatter — LinkedIn://taherjafferjee

Profile

Software engineer passionate about developing optimised, low-level systems code. Knowledgeable of *nix systems and how to develop efficient code for them. Strong problem-solving, algorithm development and Math skills.

Education

University of Toronto	2009 - 2015 B.Sc. Specialist in Computer Science with Minor in Mathematics,

Relevant Courses

Graduate courses	
Computer Graphics (C++)	Developed ray-tracing renderer from scratch. Made extensive use of C++ Math libraries
Undergraduate courses	
Operating Systems (C)	Implemented `malloc()` & `free()` using `sbrk()`, made fully functional Unix style file system using `mmap()` of a disk image.
Software Tools & Systems Programming (C)	Wrote personal web-based calendar using network sockets.
Functional Programming (Haskell, Scheme, Prolog)	Made fully-functional SQL-style database in Scheme, wrote Scheme parser in Haskell.

Skills

Low-level languages	Fluent in C, experience in hand-optimising Assembly code. Familiarity with C++. Able to use `gdb`, `objdump`, `valgrind` effectively.
High-level languages	Skilled & experienced in Python. Some experience in Java.
Scripting + OS	Knowledgeable of *nix operating systems, experienced in bash scripting. Familiarity with MATLAB.
Functional languages + Misc	Experience in Haskell, Scheme, Prolog, Verilog; basic awareness of Latex, HTML, CSS

Research Experience

UofT Computer Vision Lab	Fall 2014
Undergraduate Researcher (MATLAB, C)	Developed automatic solver for $>$ 10,000 piece jigsaw puzzles. Used k-nearest neighbours and sliding window algorithm to develop piece congruence measure which improves upon existing solutions. Accepted to Trinity College Undergraduate Student Research Poster Session. Currently developing distributed code to speed up run time.

Projects

Tea Auction Organiser	Summer 2014
C	Developed bespoke software to manage tea auction purchases for exporters in Sri Lanka. Used C network sockets to store data in server which was updated whenever purchases were made.
Container loading calculator	Spring 2015
Python	Used dynamic programming to calculate the maximum number of boxes which can be loaded into sea containers. Results in increases in loading quantities of up to 15% in some cases.

Leadership

UofT Dept. of Comp. Sci	Fall 2014 - Spring 2015 Assisted in convincing two lecturer candidates to accept employment in faculty positions.
Comp. Sci. Student Union	Fall 2014 - Spring 2015
Sr. External Liaison	Raised over $500.00 in in-kind sponsorship, helped CSSU develop strong industry relations.
UofTHacks	Summer 2014
Sr. External Liaison	Raised over $7000.00 in cash and in-kind sponsorship.

Taher Jafferjee

Github://rehatter — LinkedIn://taherjafferjee

Work Experience

Natural Foods Exports | Summer 2010 - Fall 2012