Rui Peng

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EDUCATION

Hong Kong University of Science and Technology Sept 2012 - May 2016
BSc in Computer Science and Applied Mathematics GPA: 3.93
A+ in almost all CS courses including: Algorithms, Machine Learning,
Computer Graphics, Cryptography, Search Engine, Numerical Analysis

University of Toronto (Exchange Student) Jan - Apr 2015
Courses: OS (highest score), AI, Programming Languages, Software Engineering GPA:3.94

RESEARCH EXPERIENCE

Networks Lab, CSAIL, MIT Jun - Aug 2015
· Research Internship under Prof. Dina Katabi, MacArthur Fellow.
· Designed and implemented multi-machine storage stack for WiTrack Project in Go and Postgres.
· Developed a neat online dashboard for data visualization in Django and JavaScript.

PROJECTS

getbriefr.com (startup project)
· Reading app providing high quality articles under different topics which users subscribe to.
· Automatically pick top-shared articles by analyzing recent trending tweets under the topic.
· Provides Medium-like reading experience with unified style via custom CSS.
· Implemented back-end including periodic tweet analysis in Ruby on Rails and MongoDB.
· Collaborated with 3 other team members following SCRUM with weekly sprints.

Course Planner raypeng.github.io (personal project)
· A user friendly course planning website for my fellow schoolmates.
· Course database generated by an elegant and robust crawler in Python.
· Extensive functionality and smooth interaction achieved in JavaScript and HTML5.

Racket Interpreter written in Haskell
· An elegant Turing complete Racket Interpreter with lexical scoping and graceful error handling.
· Employed Test-Driven Development. Full test coverage with 1:2 Code to Test Ratio.

Computer Graphics course projects
· Ray Tracer, Animator controllable via keyboard, Automatic Impressionistic Painter.
· Highest bonus score in course history. 7500 lines of C++/OpenGL.

Operating System course projects
· Memory Allocator with multi-threading support, Virtual Address Translator, Demand Paging
  with two-level pagetable, Page Replacement Algorithms, Ext2 File System.

Web Search Engine written in Java
· Including fast Crawler, Indexer, PageRank powered Engine, friendly web interface.

Automatic French-English Translator written in MATLAB
· Based on IBM-1 model, EM algorithm and trained on Hansard Corpus. Real time translation.

SKILLS

Proficient: C/C++, Python (Django), Ruby (Rails), JavaScript, Linux, Git
Familiar: Java, MATLAB, Go, Haskell, OCaml, Racket/Scheme, PHP