LAI TAK YI

Software Engineer

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EXPERIENCE

IBM
2012 - 2013

Software Engineer (Placement)

I worked with a small team to enhance the user experience, functionalities and accessibility of IBM iNotes. I also helped other teams to modernize legacy codebase.

CUHK
2014 - 2015

Software Engineer

I worked with educators from top universities in Hong Kong to help create a new online learning platform that will be used by thousands of local tertiary students.

EDUCATION

2010 - 2014

The Chinese University of Hong Kong

B.S. in Computer Science, First-Class Honours

Ko Ho Ning Scholarship 2011 - 2012

Dean's List 2012 - 2013, 2013 - 2014

PUBLICATION

IBM developerWorks
July 2008

Lock-free Data Structures in Java   *ibm.co/1SuGXJY*

An article discussing the implementation of lock-free (non-blocking) data structures using CAS (compare and swap) in Java to allow concurrent access without the use of mutexes

PROJECTS

Hunter vs Monsters   A first-person shooter game with Unity3D as the game engine   *bit.ly/1VBxlgl*

Lock-free Structures   Lock-free (non-blocking) stack and linked list implemented in Java   *bit.ly/1UpIjnP*

wcwidth() for OS X   A wcwidth() implementation supporting the latest version of Unicode   *bit.ly/1mZplo1*

C Binary Indexed Tree   Binary indexed tree implemented in C for finding prefix sums efficiently   *bit.ly/1RYNE7M*

UTF Transcoder   Streaming UTF-8 and UTF-16 transcoders implemented in Swift   *bit.ly/1RYNIED*

C++ Gap Buffer   C++ gap buffer implementation for efficient clustered operations   *bit.ly/1ILLrtP*

SUMMARY

I'm a 25 years old software developer based in Hong Kong. I learned programming when I was 13 and was then traditionally-trained in the university.

I love everything that has to do with system design, product design and I feel a true devotion for algorithms. I also enjoy building things that help others and benefit the community.

LANGUAGES

English   Cantonese   Mandarin

SKILLS

UNIX Programming

C/C++, POSIX API, GNU Make

Scripting

Bash, Python, Ruby

Web Development

SQL, HTML, CSS, JS, Responsive, Rails

Tools

Git, Vim, Bison, Flex

Methodologies

Test-driven Development

Agile Software Development

Object-oriented Programming