# Xin Huang

Email: <a href="mailto:patz.hwang@gmail.com">patz.hwang@gmail.com</a> Mobile: (+86) 186-0040-6436

Homepage: <a href="http://xinhuang.github.io">http://xinhuang.github.io</a> GitHub: <a href="https://github.com/xinhuang">https://github.com/xinhuang</a>

StackOverflow: <a href="http://stackoverflow.com/users/2190129/xin-huang">http://stackoverflow.com/users/2190129/xin-huang</a>

Continuous learner

• Enthusiastic programmer

Coding Dojo organizer

### Technical Overview

- Worked with C++ for more than 4 years, able to reverse C++ generated binary
- Programming languages: C# (familiar w/ WinForm .NET, able to read MSIL); Scala (finished Coursera courses); x86 ASM, Lua, Ruby (long time ago)
- Experienced with parallel programming
- Finished Scala & reactive programming on Coursera
- Familiar with TDD, OOAD; enjoy organizing/attending coding Dojos
- Familiar with Continous Integration tools like Jenkins, NAnt, etc

## Work Experience

## BGC, Schlumberger, slb.com, Software Engineer, Since 2011

Since 2014/12, Maxwell DataCore Team

I improved computation performance.

- Replaced computation engine by re-writing using tbb::flow::graph, reduced lines of code by 90%
- Profiled data computation engine and investigated performance bottleneck
- Maintenance and troubleshooting existing parallel engine
- Optimized geophysical algorithms by using SSE2, performance improved by 20%

#### 2013/1 - 2014/12, Maxwell Environment Team

I made system run faster.

- Introduced Pester as PowerShell unit test framework, hosted reading club & coding Dojos to help colleagues learn TDD & PowerShell
- Involved in CI system re-architecture and implementation, aiming a distributed "Cloud-based" CI build system, to improve resource utilization & reduce deployment
- Deployed Continous Integration system, including incremental/private/feature/clean build with unit/integration test running for each build
- Hosted various coding Dojos inside company, presented in internal workshops and events

- Investigated logging using Event Tracing for Windows, for runtime tuning and better system performance
- Accelerated build performance with distributed compilation software
- Developed software usage log analysis tool, to automatically collect & analyze usage data, and generate Excel report
- Helped team as Scrum Master; hosted coding Dojos every week to improve TDD, OOAD skills, and to learn other programming languages

#### 2011/8 - 2012/3, Maxwell DataPrep Team

- Developed & maintained Maxwell framework data processing component
- Developed Re-Compute Robot, to do both parallel & sequential computation base on same data set, for data validation & performance benchmark

#### CYOU .lnc, cyou.com, Game Developer, 2010 - 2011

- Feature development of item, family, ladder and PVP system
- Improved font rending performance
- Implemented C# delegate style event system, supporting asynchronized method invocation
- Created Lua script template for generic item operation
- Developed game robot for pressure test, extensible via Lua

# Open Source Projects

- 2015 OpenVML: Open-sourced version of Vector Math Library, focused on high performance.
  Collaboration project.
  - https://github.com/xianyi/OpenVML
- 2013 LifeGame: A demo in SLB C++ workshop on verterization. Conway's Game of Life implemented in various ways: raw loop, OpenMP, Intel IPP, Intel TBB, GLSL Shader <a href="https://github.com/xinhuang/HelloCinder/tree/master/LifeGame">https://github.com/xinhuang/HelloCinder/tree/master/LifeGame</a>

## **Publications and Presentations**

- Co-organizer of Global Day of CodeRetreat Beijing 2013
- Coding Dojo project for state/strategy pattern, used in internal sessions https://github.com/xinhuang/StatePattern

## Education

• 2010 - B.S. in Computer Science, Beijing University of Posts & Telecommunications

Last update at Aug. 25, 2015. Latest resume can be found <u>here</u>|pdf.