# Chong Yun Long

#### contact

+65 9852 0910 chong.yunlong@gmail.com

#### www

flickr.com/clouddra github.com/clouddra linkedin.com/in/chongyl

## languages

english – fluent chinese[mandarin] – fluent japanese – conversant

### programming

Ruby, Python JavaScript (ES6) x86-64, C++, C Java, C# Objective-C, PHP

#### frameworks/libraries

React.js, Ruby on Rails Redux, Alt, Immutable.js RSpec, Capybara Android SDK, iOS SDK diStorm disassembler

#### tools

Webpack, Brakeman Burp Suite, mitmproxy IDA disassembler, QEMU

## education

#### **National University of Singapore**

Aug 2010 - June 2014

1st Class Honours in Bachelor of Computing, Computer Science

- Dissertation (Applied Cryptography) Efficient Key Aggregation for Cloud Storage
- Specialization in Information Security, focus area in Parallel Computing
- Awarded Dean's List for 3 semesters

## projects

WEP Cracker Cryptanalysis attack on RC4 cipher used in WEP

**QEP** Events planner featuring a customized budget optimizing algorithm

**TeachMe!** Social networking site which aims to bring together people with common interests

SPA Static source code analyzer and parser

**Ethogram** Android app which simplifies the process of cataloging and recording animal behavior

**News Butler** Proof-of-concept Android news app which learns the preferences of user using data mining techniques

**impulsive-philanthropist** Google Chrome extension that encourages people to make donations when making online purchases

# **experience**

#### Infocomm Development Authority of Singapore (IDA)

Jan 2015 – Now

Product Engineer, Government Digital Services

- Ruby on Rails/React.js developer for Business Grant Portal (BGP) involving various government agencies
- Re-engineered the entire BGP frontend/backend into a single-page application to provide a slicker user experience and interface
- Established a unified architecture for BGP to reduce application complexity, improve code reusability, reliability and performance
- Mentored and coached the team, new hires and vendors on the latest open source technologies.
- Employed modern software development methodologies and techniques (scrum, test-driven development, pair programming) to deliver quality products with high business value
- Educating the team on good security practices to minimize security vulnerabilities during application development

#### **DSO National Laboratories**

July 2014 - Jan 2015

Member of Technical Staff, Computer Security Lab

- Analyzed protection mechanisms of Microsoft Windows kernel
- Researched novel reverse engineering techniques using emulators and virtualization technologies
- Conducted network security research on NAT networks
- If I told you more I would have to kill you ...

#### **TADA Pte Ltd**

May 2013 - Aug 2013

Mobile Development Intern

- Independently picked up iOS and Android development concepts within a period of 3 months
- Developed Shoppink (Android, 2 months) mobile e-commerce platform for blogshops. Shoppink uses a specialized algorithm to tracks products from over 200 blogshops
- Developed *ToMyself* (iOS, 1 month) mailer app designed for users who frequently send emails to themselves. *ToMyself* is available on App Store
- Gained insights into entrepreneurship

**RGE Pte Ltd** 

May 2011 - July 2011

Summer Intern

- Collaborated extensively with overseas team members for the development and testing of corporate dashboard, which presents raw data in a visually meaningful way, assisting the top management in their decision making process
- Assisted in the deployment of IT infrastructure for more than 100 staff in a newly renovated office
- Provided IT support for more than 300 end users, expediting the resolution of any technical problems faced so as to minimize disruption to their business
- Supported server and blackberry administration

**NCS Pte Ltd** 

Nov 2009 - May 2010

Temporary Staff, Chief Architect Office

- Collaborated with a team of consultants of different nationalities for a multi-million dollar government project
- Assisted analysts in the design and coding of the mockups, giving clients a visual experience, allowing them to give better feedback on the system and helps streamlines the requirements gathering process
- Developed a prototype as an illustrative reference for offshore development teams who may have difficulties understanding the specifications due to language barriers

# certifications

Kanban Management Professional - I

Since Jun 2016

Lean Kanban University

Organizational Systems Web Application Pentester

Since Apr 2015

ThinkSECURE Pte Ltd

**Certified ScrumMaster®** 

Scrum Alliance

Apr 2015 - Apr 2017