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
LaTeX

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
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

publications

Practical and Scalable Sharing of Encrypted Data in Cloud Storage with Key Aggregation IH&MMSec 2016
React Rails for Business Grants Portal Medium

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®   Apr 2015 – Apr 2017
Scrum Alliance