

Yihong Chen

OBJECTIVE: XXX

Education

- 2013 – Present **PhD, Computer Science**, University at Buffalo, The State University of New York, **GPA: 3.7/4.0**.
- 2009 – 2011 **Master, Software Engineering**, Beijing Institute of Technology, China, **GPA: 3.3/4.0**.
- 2004 – 2008 **Bachelor, Electrical Engineering and Automation**, North China Institute of Science and Technology, China.

Project & Research Experience

- December 2014 **Structuring Uncertainty Using the maybe Statement, Leader.**
– Present
 - Introduce [maybe syntax](#) to enable uncertainty programming for mobile system, implement [all components](#):
 - Custom Java Compiler, translate maybe syntax to ordinary Java code and bytecode
 - Gradle Plugin, provide seamless experience for Android developers to use maybe syntax: [demo video](#)
 - Web App, use Meteor to provide REST API and reactive web app
 - Android Library, communicate with maybe backend and cache choices
- October 2014 **Flexible and Effective Smartphone Energy Management: Jouler, Contributor.**
– Present
 - Introduce a policy framework enabling effective and flexible smartphone energy management
 - Add a system service in Android platform that provides several energy control mechanisms
 - Develop Android app to provide different energy management policies
- February 2014 **Project of Introduction to Operating Systems, Implemented large parts of a POSIX-compliant kernel.**
– May 2014
 - Implemented Synchronization Primitives, System Calls, and Virtual Memory Management
- April 2010 **Studying the Topic of Extracting Attributes and Their Values of Domain Objects, Research Proposal for Master degree.**
– June 2011
 - Used NLP and semi-supervised Machine Learning to extract attribute or attribute value from encyclopedia websites
- December 2009 **Theory and Method to Ontology Learning Field about Chinese Text, Cooperate with team and maintain previous projects, Funded by National Natural Science Foundation of China.**
– June 2010
 - Tagged and standardized time expressions from Chinese free text
 - Designed and implemented a web platform to demonstrate all subprojects (written in different languages)

Programming Skills

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| Android | <ul style="list-style-type: none">Modify AOSP code: jouler, maybeCustomize gradle build systemDevelop plugin for Android StudioDevelop Android Apps in PhoneLab project for research purpose | Java | <ul style="list-style-type: none">Wrote more than 20,000 lines of Java code, includes server side, Android platform/appCustomized Java compilerProficiency in Garbage Collection of Java & Dalvik |
| JavaScript | <ul style="list-style-type: none">Familiar with Node.js & Meteor, implement Maybe Backend: maybe.xcv58.meMeteor package: xcv58:collection-apiWrote Chrome Extensions and Atom Packages | Backend | <ul style="list-style-type: none">Well understand RESTful API DesignFamiliar with Linux servers: nginx, ApacheKnowledge of Different Databases: MongoDB, MySQL |
| C | <ul style="list-style-type: none">Implement all Harvard OS/161 assignments, able to modify Linux Kernel | Python | <ul style="list-style-type: none">Familiar with matplotlib & Plotly, use python to process log and plot figures |
| Other | <ul style="list-style-type: none">Git, in daily usageUse regular expression fluently in various languagesGroovy, in custom gradle pluginWrote Emacs codes for my Emacs configMatlab, Machine Learning projects | Other | <ul style="list-style-type: none">PHP, customize WordpressLua, wrote plugins for Google Pinyintmux, sed, grep, awk, etc. in daily usageL^AT_EX, write papers/documentationsmy github Shell repositoryVim and Emacs in daily usage |