

Weichuan “Albert” TIAN

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Objective:

A full-time Mobile Engineer position that will benefit from my creative problem solving skills and unique perspective of products.

Technical Skills:

- Languages: Swift, Objective-C, C, C++, Java, Ruby, JavaScript, HTML, CSS
- Platforms/Frameworks: iOS, Rails, Git, Unity3D, OpenGL, ImpactJS, Box2D

Professional Experience:

Mobile Engineer, Papaly

Dates: 03/2016 – Present

- **Riple** – Working on a social enhanced news digest app in a mobile team of two. Picked up Swift and code base in half a month after joined. Built local/global search feature, doubled app’s FPS by catching memory leaks and optimizing layouts, bug fixes and refactored across the app which reduced the crash rate by 50%. <https://itunes.apple.com/app/id1017796980>
- An app still in stealth mode. Architected the whole app and built 90% of the features which made extensive use of MVC, auto layouts, data synchronization techniques. Features include QR Scan, mobile payments, Facebook connection etc.
- Working on **Papaly** bookmark management web app with JavaScript and Ruby on Rails. Improved bookmark import feature using recursion to include bookmarks’ original path, implemented thumbnails substitution feature.

Mobile Engineer, KarFarm Inc.

Dates: 09/2015 – 03/2016

- **KF Sales** – Designed, architected, developed the company car sales iOS utility app independently. App allows auto dealers to check leads and respond, compare with other dealers’ offers, real time chatting with the customers and taking notes. <https://itunes.apple.com/app/id1072541459>
- Key improvements compared to the previous version: using CocoaPods to manage dependencies, version control with Git, custom dropdown filter menu and sidebar, extensive use of auto layout, parallax collection view to compare offer details, and standardized architecture design and code quality.

Mobile Engineer Intermediate, Yahoo! Inc.

Dates: 02/2014 – 09/2015

- **Yahoo!** – Working on the Yahoo native iOS universal news app in a team of 5 people. <https://itunes.apple.com/app/id304158842>
- Strictly followed design specs to layout detail view of the news, full article ads and breaking news minute by minute.
- Integrated internal SDKs while supporting as a SDK into other Yahoo native apps.
- News notification subscription and presentation API design.
- Tableview custom section and message prompt architecture design and implementation.
- Addressed international release and iOS6/iOS7/iOS8 specific layout issues.
- Product features initiation, fast prototyping during hackathon; Code review; Intern mentoring;

Software Engineer, KarFarm Inc.

Dates: 07/2013 – 02/2014

- **KF Dealer** – Designed and developed an iOS utility app independently and submitted two releases to app store. App allows auto dealers to check leads and respond, compare with other dealers’ offers, real time chatting with the customers and record successful sales on address book or send emails. <https://itunes.apple.com/app/id743116884>
- Integrated the app with PubNub for cross platform real time chatting, MBProgressHUD to show network fetch progress.
- Company website maintenance and bug fixes using Backbone.js, Ruby on Rails and SQL Server.

Game Programming Instructor Intern, National High School Game Academy at CMU

Dates: 06/2012 – 08/2012

- Taught pre-college students game development techniques using Unity3D game engine.
- Advised on student projects using Wii Remote, game steering wheel and audience interaction.

Academic Experience:

Backend Engineer, GlassLab, Inc.

Dates: 01/2013 – 05/2013

- **iAchieve** – Implemented the data layer of an iOS data visualization app. App enables students to interact with their

performance through a visualization of the “Tree” concept which I initiated. <http://www.weichuantian.com/iachieve.html>

- Local data import and parsing with XML.
- RESTful web services development to retrieve data from server with XAMPP by JSON, PHP and MySQL.

Game Engineer, DARPA ENGAGE STEM Game

Dates: 09/2012 – 01/2013

- **Torque It!** – Scripted the main game mechanic - puzzle solving by balancing or unbalancing the beam in JavaScript on HTML5 canvas. weichuantian.com/torque-it
- Incorporated the Box2D revolute joint to make the seesaw like beam act more naturally.
- Created a NPC with AI to cooperate with the player by taking turns to make movements.

Graphic Engineer, Shader, Raytracing and Physics Engine

Dates: 01/2012 – 05/2013

- Wrote shaders in GLSL to enable the outlining and motion blur of the objects. weichuantian.com/cg
- Backward raytraced the scene with multiple objects through reflection and refraction.
- Implemented a collision detection engine which works for damping, spring and newton’s cradle.

Education:

Entertainment Technology Center (ETC), Carnegie Mellon University

Master of Entertainment Technology (MET)

May 2013

Beijing University of Posts and Telecommunications (BUPT)

Bachelor of Engineering in Computer Science

Jun. 2011

Activities and Honors:

- Telly Awards: 2012 Internet/Online Video award for “Imaginary Friend”. <http://www.weichuantian.com/me.html>
- Weight throw champion for three consecutive years in the Capital University Games of China 2009-2011.
- Excels in basketball, table tennis, squash, badminton, taekwondo, piano and guitar.