

# Bo Zhang

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## Education

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University of Pennsylvania: Philadelphia, PA

Aug 2013-May 2015

- M.S. in Engineering in Computer Graphics & Game Technology

**GPA: 3.90/4.00 Top 5%**

Beijing University of Technology (BJUT): Beijing, China

Sep 2009 -July 2013

- B.S. in Electrical Engineering

**GPA: 3.85/4.00 Top 1%**

## Skills

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- Language: C++, C#, Lua, Objective-C, TypeScript
- Framework: React, React Native

## Work Experience

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Step Mobile: Palo Alto, CA

Senior Full Stack Engineer

Nov 2021-Present

- Drove implementation, testing and rollout for several onboarding experiments including interest survey, interest based KYC and account progress list. Which provides users customized experience and improved onboarding user rate (~3%) and KYC success rate (~7%). **(TypeScript)**
- Contributed to the helper cards migration to server, which enabled update helper cards live without bundle release. **(TypeScript, Kotlin)**
- Built and rolled out lending features including overdraft and borrow money, allow adult users to spend over balance and pay bills over time. **(TypeScript)**
- Built up change logs and transaction track for recurring transfer, set up website for customer service to track user recurring transfer activities. **(TypeScript, Kotlin)**

Google LLC: Mountain View, CA

Senior Software Engineer

Jul 2021-Oct 2021

- Designed and contributed to the custom Emoji feature of Google Chat Web. **(JavaScript)**

Technical Leader

Aug 2020-Jul 2021

- Performed as Technical Leader for Google Maps iOS Live View team. Organized and led sprint planning meetings and kept aligned with other teams.
- Led two Google Maps iOS Live View features releases: AR Lighthouse and AR Location Calibrator successfully with a challenging deadline.
- Re-designed infrastructure for Google Maps iOS Live View features. Eliminated duplicated logic and migrated to shared components. Improved code readability, reusability and maintainability. **(C++, Objective-C)**

Software Engineer II

Feb 2019-Aug 2020

- Designed, implemented and tested Google Maps iOS AR Location Calibrator feature, which introduced a new entry point to improve location accuracy using AR technique. **(C++, Objective-C)**
- Led Google Maps iOS AR Walk Navigation Arlo (internal cross-platform engine) migration to align with Android implementation stack, which cut down feature development cycle. **(C++, Objective-C)**
- Designed, implemented and tested Geo AR iOS Low Light Image Processing (using Pixel-Binning technique), which increased Live View feature localization performance over 3% during night. **(C++, Objective-C)**

Roblox Corporation: San Mateo, CA

Software Engineer II

Jan 2017-Feb 2019

- Released the cross-platform play feature which enabled Roblox Players to play with Xbox Players and built up the cross-platform social map based on Lua version of React and Redux Framework. **(C++, C#, Lua)**
- Designed and built the caching system for Roblox Xbox, centralized game data and avatar data through the app and enhanced the loading/refreshing speed by 50% on game and avatar panes. **(C++, Lua)**
- Designed and built several Microservices (games, thumbnails, account settings), which separated different functional components from old monolith service. **(C#)**

Software Engineer I

Oct 2016-Jan 2017

- Designed and built the analytics system for Roblox Xbox with the internal logging system, which enabled real-time and non-real-time track of key metrics including DAU, retention, crash rate, etc. **(C++, Lua)**
- Designed and built a crash dump system for Roblox Xbox. Triaged and fixed top crashes timely, reduced the app crash rate from 0.2% to 0.05%. **(Code: C++, C#)**

#### Here North America LLC: Berkeley, CA

*Software Engineer I*

*Sep 2015-Oct 2016*

- Released the HERE Reality Lens Add-in for the ArcGIS Desktop. The add-in enabled ArcMap users to see 3D panoramas based on 2D base map location and perform editing, measurement and identification. **(C#)**
- Represented as a key contact and discussed with product managers from Paris and Dubai branches to improve the HERE Reality Lens Add-in.
- Designed and implemented the Info box in Reality Lens JS SDK using WebGL technique, which was released on the official website. **(Code: JavaScript)**

#### Honors

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- 2013 Outstanding Graduate of Beijing
- 2014 Penn Play Game Jam, Award for Best Theme

#### Engineering Projects

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- **Alien Exploration:** Led the team of 4 to design and develop a Unity game in which players use tools to help the alien survive and go back home. Particle system, rigid body and animations included. **(C#)**
- **Water Simulation:** Implemented a water simulator based on SIGGRAPH paper 'Matching Fluid Simulation Element to Surface Geometry and Topology' as Unity extension, expanded OBJ support. **(C++)**
- **WebGL Path Tracer:** Developed and improved a WebGL version Path Tracer, in which most of the computation of path tracer was written in the shader in GLSL. Also added UI control on the webpage. **(GLSL)**