

EXPERIENCE

- **TeleNav** Santa Clara, CA
Engineering Manager May 2018 - Present
 - **ARP**: ARP is an TeleNav Automotive Reference Product; a full navigation product out of box for Android system. Lead 8 engineers work on it, define the technical roadmap, and identify key areas to improve.
 - **VIVID**: VIVID is an In-Vehicle infotainment system based on Android platform. Lead 6 engineers work on the implementation of system launcher and media application.
- *Staff Software Engineer* Jan 2015 - May 2018
 - **Overall**: Built an in-car navigation application that ships to General Motors and serves millions of vehicles. Play a tech leader role and lead 10 engineers successfully delivered it to multiple regions with different screen sizes and languages supported-in.
 - **Multiple Screens**: In-car app requires to support multiple screens in the vehicle such as Central Stack, Cluster, RSI. Developed the AIDL interfaces and implemented the navigation service for inter-processes communication.
 - **Map Display**: Map Rendering requires separate surface in the window to display the map tiles, route and POIs on the screen. Developed the GIMapSurfaceView and delegated render thread that controls Android GLSurfaceView and draw frames into surface.
 - **Performance**: Lead 2 engineers and improved the app startup time from 30s to less than 5s, saved the memory usage from 1GB into 700MB, and reduced twenty-percent of the CPU peak usage. Write tools to collect the System Logcat logs and generate metrics automatically.
 - **Predictive Cards**: Developed the core feature Predictive Cards that will show user the most predictable destinations in the particular time based on the driving history. <https://github.com/jp-wang/PredictiveCard>
 - **MVP Framework**: Developed the core MVP framework by following the MVP design pattern that is open-sourced in Github. Post was read by more than 300 times <https://medium.com/@jpwang/deep-dive-into-mvp-0x01-e3d85e852c8>
 - **Search**: Built the full Onebox search hybrid flow as well as search along route during user's active navigation.
 - **Experiment**: Lead two experimental features and one technical improvement. Features: Smart Gas, Electric Vehicle route planning. Technical improvement: Remote Rendering which will render the map on different surfaces from other processes.
- **TeleNav(Shanghai) Inc.** Shanghai, China
Senior Software Engineer July 2011 - Jan 2015
 - **Navigation**: Developed the navigation panel that provides Turn-by-Turn guidance, ETA and Distance.
 - **Drive with friends**: Developed the social feature that shares your real-time location with your friends dynamically.
 - **Login**: Implemented the login feature by connecting different social login port such as Google, Facebook and Email.
 - **Car Connect**: Developed the library that can send/receive last mile location from the car into the phone app.
- **Hewlett-Packard** Shanghai, China
Software Engineer July 2009 - July 2011
 - **Tickets Management**: Developed the ticket management web application that will collect the events from Customer's device and generate tickets automatically.
 - **Microblog**: Microblog is a system alike the Twitter. Self-learned the Android platform and implemented the mobile client application from scratch.

PUBLISHED PRODUCTS

- **Scout**: A social navigation app used by millions of users and commented by a hundred thousand people.
- **GM Nav**: A full navigation system running on GM 3.x infotainment.

PROGRAMMING SKILLS

- **Languages**: Java, Kotlin, Python, Shell, SQL **Technologies**: Jetpack, Dagger2, Retrofit, RxJava, Coroutines

EDUCATION

- **East China Normal University** Shanghai, China
Bachelor in Software Engineering Sep. 2005 - July. 2009