

# Yong Yuan

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## Education

- 2003.09 - 2006.03 **Master**, ME of JiaoTong University, Shanghai, (an honor of Excellent Graduate).  
1999.09 - 2003.07 **Bachelor**, ME of JiaoTong University, Shanghai.

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## Work Experience

### Shanghai Astrob Information Technology Co., Ltd. (2006.03 - now)

- 2011.03 - now **ALP V2**, Technical Manager, Team Leader.  
ALP V2 is a web map system, like google maps, provide SDK of javascript and smart mobile phone, including iphone and Android, and also can connected with REST HTTP api. Subsystem includes Map Tile System, Real-time Tile Rendering system, Poi search/Geocode System, Route System, Traffic System, Auth System, the access layer system using LVS, Nginx, Varnish, MySQL, Redis, MongoDB, logging and monitoring system.
- Responsible for the ALP V2 system requirements analysis, architecture design.
  - Responsible for developing of the full stack C++ network application framework (similar to Fina-ngle), based on the Cetty, supporting protocols including the protobuf-RPC, REST HTTP.
  - Responsible for developing gearman-based task system, and the distributed real-time map tile rendering system based on this.
  - Responsible for developing POI query system, oriented geographic information, based on the Sphinx (including geographical Chinese characters segmentation system based on the the CSWS).
  - Responsible for developing C++ Authentication & authentication system, similar to shiro.
- 2008.10 - 2011.03 **ALP(Astrob LBS Platform)**, Technical Manager, Team Leader.  
ALP is a LBS application platform, focus in GPS navigation, similar to the TSP (Telematics Service Provider), providing real-time traffic information, rich POI, Car Mate Club, call center destination setting, seamless integration to third parties' CTI and SP.
- Responsible for the ALP system requirements analysis, architecture design.
  - Lead the team to develop high concurrency socket network framework, based on ACE.
  - Responsible for developing cross-platform (WinCE, Windows, Linux) OSGI like C++ plug-in frame-work.
  - Responsible for developing C++ persistence layer framework based on ODBC, and RPC frame-work based on Google Protobuf.
  - Responsible for POI search system based on the Sphinx, and logging system.
  - Using MySQL, Redis, MongoDB, Sphinx, Protobuf, the ACE and other open source software.
  - The ALP Solution (including CPND navigation) has been successfully operated in CarSmart project since 2010.
- 2008.10 - 2011.03 **CPND(Connected PND) GPS Navigation**, Technical Manager, Team Leader.  
CPND navigation software, intergated the function provided by the ALP.
- Responsible for the requirements analysis and architecture design of the CPND navigation.
  - Responsible for the core C++ library (cross-platform foundation library, logging system, config-uration library, the signal slot, etc.).
  - Responsible for the team building.
  - Responsible for developing OSGI plug-in framework, for good scalability, using unit test with gtest.
  - Development under SCRUM, project management using Redmine, continuous integration using Hudson.

- 2007.06 - 2008.10 **Panasonic pre-installed GPS navigation**, Senior Software Engineer, Team Leader.  
A new pre-installed GPS navigation software for Taiwan and mainland China market, OEM for Panasonic.
  - Discuss the requirement with the customer, design the software architecture.
  - Manage the daily project development, lead the teammates to design the framework and develop the module, and control the software quality and the project process.
  - The GPS navigation for Panasonic has launched on the markets of China MainLand and Taiwan.
- 2007.03 - 2007.06 **GPS navigation customized for GSL**, Senior Software Engineer, Team Leader.
  - Discuss and confirm the requirement of GPS navigation with the client of GSL, make customization development according to the client's requirement, take charge integration test and the final release.
  - The GPS navigation for GSL has launched on US market.
- 2006.10 - 2007.03 **MapManager**, Software Engineer.  
A desktop tool for installing and updating the GPS navigation and map data, supporting multi-language.
  - Responsible for MapManager requirement analysis, design and development.
- 2006.06 - 2007.01 **Setting up and improve the process and procedure of the software development**, Software Engineer.
  - Responsible for the development of internal software development process (in the assistance of consulting company).
  - The software development process and configuration management applied in company successfully.
- 2006.03 - 2006.07 **The voice guidance module of the GPS navigation system**, Software Engineer.
  - The wave & ogg player, in Windows CE & Linux.

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## Open Source Experience

- 2010.12 - now **Cetty**, <https://github.com/frankee/Cetty>, Project Founder.  
The Cetty project is a network application framework for easy developing high performance and high scalability servers and clients. It comes from Netty project, and based on boost asio, using reactor network pattern.

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## Research Experience

### Robot Research Institute of JiaoTong University (2003.03 - 2006.02)

- 2005.08 - 2006.02 **The tobacco leaf packages unpacking robot system**, Project Leader.  
The robot, cooperated with ABB, can unpack effectively the tobacco packages.
  - Responsible for the architecture design, and the research of computer vision and control algorithms.
  - The robot system applied to Shanghai Tobacco Company successfully.
- 2003.03 - 2006.02 **The autonomous mobile robot**, Team Member.  
Participated in the medium-sized autonomous robot soccer of the RoboCup (the Robot World Cup).
  - Involved in the robot architecture design, developed the real-time intelligent motion control system based on RTLinux.
  - The competition winner of the 2005 China RoboCup, motion control algorithm published in the Journal of Shanghai JiaoTong University.
- 2004.09 - 2005.04 **The OMRON entertainment robot**, Project Leader.  
The robot, cooperated with OMRON, can interact with the audience on stage performances.
  - Responsible for the project development process. Leading robot control software development.
  - Took part in Shanghai International Industry Fair 2004, and interviewed by many news media.

2003.03 - 2004.12 **The intelligent fruit auto-sorting robot**, Team Member.

Cooperated with the Shanghai Agricultural Committee.

- Responsible for the computer vision recognition algorithms development.
- The robot got through the Shanghai agricultural committee's approval, and the related research at the magazine of the Robot.

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## Languages

English **CET-6, Fluent in English**

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## Computer skills

Language Expert knowledge in C++, familiar with Java, Javascript

Tools Linux, boost, poco, gtest, Protobuf, ACE, MySQL, Redis, MongoDB, Memcached, Sphinx, svn, git, Redmine

Others UML, OSGI, OOD, SOA, Design Pattern, RUP/SCRUM

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## Extra

- Open-minded, creativity, responsible, teamwork spirit, good interpersonal skills and leadership.