

Large Portfolio

Flying Car

- Independently designed and implemented a virtual driving system.
- Recognition of simple gesture is powered by the API from Leap Motion device.

RoboWheel

- Independently designed and implemented a mobile robot.
- Components of robot is supplied by the ROBOTERRA company.

ThuBitCoin

- A Bitcoin transaction system with Hadoop distributed system.
- Source code is available on <https://github.com/ZhouDavid/ThuBitCoin>.

ShadowCats

- A website for kids to learn programming with game playing.
- Source code is available on <https://github.com/ZhouDavid/Shadowcats>.

16-bit THCO MIPS

- Designed and implemented a 16-bit MIPS CPU with VHDL on FPGA.
- VGA and keyboard are also implemented in our Computer with other two members.

China Crowdsourcing

- A crowdsourcing website (<http://www.chinacrowds.com>) for users to issue and solve problems online.
- Independently designed and implemented all web pages with HTML, CSS and JavaScript.
- Source code is available on <https://github.com/ZhouDavid/ChinaCrowdSource>.

Academic Activities

- Involved in MCM (Mathematical Contest in Modeling) with other two members and completed a paper *An Optimal Strategy for Goodgrant Foundation*.
- Independently involved in Kaggle competition for *San Francisco Crime Classification* and got 318th place out of 2335 groups, top 15%.