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%.