

Haotao Lai

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Education Background

Time	Institution	Degree	GPA
2012.09 ~ 2016.06	Guangzhou University	Beng.	80%
2016.09 ~ now	Concordia University	Masc.(expected)	N/A

Academic Experience

A kind of weeding robot based on computer vision (2016.03 ~ 2016.06)

- Won the outstanding graduation project award (rank: 2 / 200)
- Independently developed the whole system contains: Android, VB.net, Halcon, Network communication

Internet express system (2015.01 ~ 2016.06)

- Received 10,000RMB funding and a patent authorization
- Team leader of the whole project
- Created intelligence-based interactive system (both client and server)
- Implemented communication between android and STM32 as the control unit

Obstacle avoidance remote control robot (2015.09 ~ 2016.06)

- Created using Arduino and Visual Basic
- Independently wrote the libraries using Arduino
- Used three casters for implementing moving system
- Design obstacle avoidance algorithm
- Using RS485 communication protocol to organize the sensor network
- Using Visual Basic for master computer's UI and controll system

Speical projects for blind and disable children (2014.09 ~ 2015.06)

- Projects fundedby Guangzhou Education Bureau

Entertainment based system (dancing mat) for blind children

- Developed (as 2-nd author) using STM32, SD card, I2C communication protocol and DMA
- Through investigative research done at the Guangzhou Blind Children School to better learn how to design communication for children's needs

Search toolfor blind children

- Developed (as 2ndauthor) using Arduino and NRF24L01

Disability assistant page reader

- Applied mechanical engineering design as 1st author for the linkage, and fabrication of the synchronous belt pulley and the motor

Forklift truck system (2013.09 ~ 2014.06)

- Developed (as 1-st author) using Arduino, Bluetooth, android, and 3D printer
- Received a 2-nd place award in school project competition and a patent authorization

Awards

- Guangzhou University outstanding graduation project award (2016)
- Guangzhou University the 2-nd place scholarship (2016)
- Guangzhou University the 3-rd place scholarship (2015)
- Guangzhou University Lab Competitions (1-st and 2-nd place in 2013 and 2014)
- University's Science and Technology Innovation Contest (2-nd place in 2013)

Skill

- programming language: Java, JavaScript, C, Python (familiarization decreasing order)
- English proficiency: IELTS 6.5 (no band below 6.0)
- Hardware development: STM32, AVR, Arduino, 80C51