

WenGuang Huang

Technical Skills

Languages: Java, C++, JavaScript, Python.
Frameworks/Libraries: Android sdk, Numpy, Pandas, Sklearn
IDEs: Android Studio
Databases: sqlite
Other: Git/GitHub.

Project Experience

Robot Motion Planning - https://github.com/willhwongwork/robot_motion_planning

March 2017

- This project takes inspiration from Micromouse competitions, wherein a robot mouse tries to plot a path from a corner of the maze to its center.
- This project requires creating functions to control a virtual robot to navigate a virtual maze.
- A simplified model of the world is provided along with specifications for the maze and robot; the goal is to obtain the fastest times possible in a series of test mazes.

Creating Customer Segments - <https://github.com/willhwongwork/creating-customer-segments>

January 2017

- Reviewed unstructured data to understand the patterns and natural categories that the data fits into.
- Used multiple algorithms and both empirically and theoretically compared and contrasted their results.
- Made predictions about the natural categories of multiple types in a dataset, then checked these predictions against the result of unsupervised analysis.

Smart cab - <https://github.com/willhwongwork/new-smartcab>

November 2016

- Applied reinforcement learning to build a simulated vehicle navigation agent.
- This project involved modeling a complex control problem in terms of limited available inputs, and designing a scheme to automatically learn an optimal driving strategy based on rewards and penalties.

Building a student intervention system - https://github.com/willhwongwork/student_intervention

September 2016

- Investigated the factors that affect a student's performance in high school.
- trained and tested several supervised machine learning models on a given dataset to predict how likely a student is to pass.
- Selected the best model based on relative accuracy and efficiency.

Work Experience

Freelance -Interior Designer

GuangZhou, GuangDong| February 2015-January 2017

- Freelance and commission works of interior design

HongTu Architecture Firm. - Design Assistant

GuangZhou, GuangDong| July 2013-January 2015

- Designed layouts, planes, facades for Architectural Projects..
- Use CAD for technical drawing of Architectural Components.

Education

Udacity - Android Nanodegree, Machine Learning Nanodegree
South China Agricultural University - Architecture, B.S.

September 2008- June 2013