Selected Projects before 2015

Personal Commit Rate_C

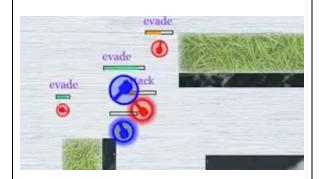
Software Development Process Bad Smells Detection [2015] (Report)

The goal of this project was to detect Bad Smells in the software development process by looking at the commits, issues, pull requests, labels and milestones in GitHub Repository.

Using the gitable.py to collect the issues, milestones, commits and labels, etc. from the selected repos.

Implemented 6 bad smell detectors to detect whether this repo exists some bad smells during development process, such as Issue Time Duration Detector, etc.

Create an early warning--"Lazy guy early warning" from the upper lessons learned.



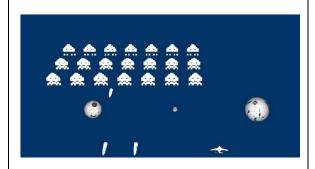
Robot Arena game with combat AI [2015] (slides | code | demo)

Robot Sumo is a robotic sport in which two robots are fighting for pushing opponents out of the stage. In project Robot Arena, we tried to build a virtual game to simulate Robot Sumo. We applied the artificial intelligent techniques into our virtual game, so that robots can act as smart individuals and as a team with a group strategy.



Web-based Room Reserving System [2014] (code | demo)

The goal for this project is to develop a web-based platform that allows students to reserve rooms and form study groups, as well as finding and joining existing groups conveniently. Through this platform, users are able to select a room according to their preferences of the day in a week, and choose a time frame for a study group, the creator of study groups can also update information that are relevant and delete the groups they created. Users could also find and join groups created by others with the search function provided.



Space Invader in OpenGL [2014] (code)

This project was to simulate the classic game "Space Invader" by OpenGL. In addition to implement to basic components, such as the field, players' cannon, cannon shooting, this project also included some additional effects. Such as the monsters exploding when shot, UFOs move across the top periodically and shoot, multiple lives, etc.



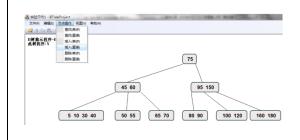
Handling and segmentation of bat CT images [2014] (Advisor SDU-VT Lab)

In this project, we first developed segmentation algorithm for bat wing computed tomography images, reconstructed their 3D surface model with the help of Meshlab. Finally connected every bone for the bat hands and simplified the model by adapted LS-Mesh method. This was thesis for the bachelor's degree.



InnoTraffic-Intelligent navigation system [2013]

In this system, we first developed a model to express various kinds of roads, overpass or tunnel etc. in the city. Then we analyzed the real-time data collected from the system by the cellular automation model. In addition, we also developed an android app based on this system. The app won the Second Prize in International Contest of Applications in Network of Things (China) 2013.



Study on the query and update efficiency of B-Tree [2012]

This is my course design of Data Structure class. To begin this course design, I first studied the structure of B-Tree and the common operation upon it. Then I wrote a B-Tree using C++, analyzed the spatial complexity and time complexity of the B-Tree and its operation. Finally, I also compared this data structure with other similar data structure-B* Tree, B+ Tree