

YAN TIANXING

skywalkerytx@gmail.com | (+86)18801790728 | 102300

EDUCATION

TONGJI UNIVERSITY

BS IN COMPUTER SCIENCE

Conc. in Algorithm

College of Electronics and Information Engineering

COURSEWORK

UNDERGRADUATE

Computer Networks

Machine Learning

Artificial Intelligence

Unix Tools and Scripting

Database

SKILLS

PROGRAMMING

Over 10000 lines:

C# • C++ •

Over 1000 lines:

C • Matlab • T-SQL • XML • \LaTeX

Familiar with:

Shell • Python

PROJECT EXPERIENCE

AR SYSTEM WITH GESTURE RECOGNITION | NATIONAL UNDERGRADUATE STUDENT CREATIVE PROJECT

This augmented reality system is designed to help traditional media(e.g. books/paper publications) become multimedia publications. System use a camera to scan every page. When some special QR Code is recognized, system's projector will directly show additional information on that page. User can use gesture and voice to interact with this system. This project is also joined Intel® Perceptual Computing 2013.

RESEARCH

KEY LABORATORY ON EMBEDDED SYSTEM AND SERVICE COMPUTING | HEAD UNDERGRAD RESEARCH

Worked with Zhongcheng Yang and my mentor Chen Ye to do research on TSP, a famous NP problem. Finally we developed a new Genetic Algorithm which can deal with problem set bigger than 100K nodes with little error rate.

IEEE CONFERENCE PUBLICATION

AN EFFICIENT AND SCALABLE ALGORITHM FOR THE TRAVELING SALESMAN PROBLEM CHEN YE, ZHONGCHENG YANG, TIANXING YAN IN ICSESS 2014

This paper presents a genetic algorithm based on dynamic programming for solving large-scale instance of the Traveling Salesman Problem (TSP) to optimality. First, an improved dynamic programming algorithm is described to deal with large-scale data, and then it is used as crossover and mutation operator in genetic algorithm. Simulation results show that this novel method with good stability can solve TSP with very-large-scale, effectively reduce the error rate, and improve the solution precision while keeping computational complexity relatively low.

AWARDS

2012	1 st Prize	Tongji University Programming Contest
2012	Bronze	ACM/ICPC Zhejiang Regional
2012	Honorable Mention	Mathematical Contest In Modeling (America)
2012	National 2 nd	Mathematical Contest In Modeling (China)
2013	Meritorious Winner	Interdisciplinary Contest In Modeling (America)