Tianyu Cheng

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EDUCATION

UNIVERSITY OF TEXAS

B.S. in Computer Science
May 2016 | Austin, TX
College of Natural Science
Turing Scholars Program
Major GPA: 3.87 / 4.0

B.S. in Mathematics
May 2016 | Austin, TX
College of Natural Science
Major GPA: 4.00 / 4.0

COURSES

Operating Systems (In Progress)
Data Management (In Progress)
Programming Languages (In Progress)
Computer Organization & Architecture
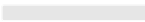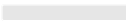Contemporary Issues in CS
Data Structure

SKILLS

PROGRAMMING
C/C++
Java
C#
Python

WEB DEVELOPMENT
HTML/CSS
JavaScript
CoffeeScript
Node.js
Django

GRAPHICS & GAME
OpenGL
WebGL
GLSL
Unity

OTHERS
Photoshop

LINKS

Github: **tycheng**
Homepage: **www.cs.utexas.edu/ jhcty11/**

EXPERIENCE

DIGITAL MEDIA INSTITUTE | Student Technician
Jun.2014 – Present | Austin, TX
- Worked on the back-end OOP design and implementation of an educational game with Unity and C#.
- Developed several third-party tools to facilitate game data management in Python, and provides a sanity check of the validity of the data.
- Refactored back-end codes to comply with MVC pattern.

SHENZHEN FORTUNES TECHNOLOGY | Test Engineer
Jun.2008 – Sept.2008 | Shenzhen, Guangdong, China
- Worked on module testing and code review in C++.

PROJECTS

3D GRAPHICS ANIMATION | OpenGL GLSL
- A shader-based OpenGL program that renders animating MMD 3D models. It provides a basic scene manager and a MMD-based renderer for small graphics applications.
- Currently being ported to web platform using WebGL and CoffeeScript.

ONLINE LINEAR ALGEBRA SOLVER | Python Django
- Many high school students are getting ahead in Mathematics. This project aims to help students learn linear algebra by examples.
- Dynamically solve problems and show the individual steps of how they are solved. The supported problems include row reduction, matrix multiplication, inverse of matrices, eigenvalue, and diagonalization.

ONLINE LAW CASE MANAGER | Office Automation
- Law cases management generally involves repetitive operation. This project aims to simplify the procedure.
- Implemented with Python, Karrigell and MySQL.
- Provides an easy-to-use UI for users to archive, modify and delete law case records. It also generates law case documents for printing.

ONLINE WEBSITE DESIGNER | User Experience
- This project owes the inspiration to online website editing tools, e.g. Weebly and Yola.
- Implemented with Java Struts, HTML/CSS and JavaScript.
- Creates a user-friendly interface to customize websites by drag-and-drop.

DESKTOP TASK REMINDER | Qt Sprite
- This project is a birthday present for my mother.
- Implemented with Qt for GUI and sqlite3 for task management.
- Provides a customizable notification system and sends out notifications asking user to rest every two hours.