

# CIS300 System Programming

## Instructor Information

- Dr. Yuzhe (Richard) Tang (ytang100@syr.edu)
  - Office: CST 4-193

## Texts

- Lecture notes
- References (Optional):
  - "Computer Systems: A Programmer's Perspective," Randal E. Bryant and David R. O'Hallaron
  - Bash Guide for Beginners: [[tldp.org/LDP/Bash-Beginners-Guide/html](http://tldp.org/LDP/Bash-Beginners-Guide/html)]
  - Advanced Bash-Scripting Guide: [[www.tldp.org/LDP/abs/html/](http://www.tldp.org/LDP/abs/html/)]
  - Using GNU's GDB Debugger: Memory Layout And The Stack: [[www.dirac.org/linux/gdb/02a-Memory\\_Layout\\_And\\_The\\_Stack.php](http://www.dirac.org/linux/gdb/02a-Memory_Layout_And_The_Stack.php)]

## Learning Objectives

The learning objective is system programming skills in Linux/Unix environments. The programming skills to learn include bash scripting, C programming language, C programming tools in Linux and systems-level programming, etc.

## Prerequisites

- ECS102 or an equivalent programming course

## Grading

- Class participation (15%), homework (40%), exams (45%)

## Schedule (Tentative)

1. Linux/VirtualBox setup
2. Shell
3. C programming language
4. C programming tools on Linux
5. Systems-level programming