CIS300 System Programming

Instructor Information

- Dr. Yuzhe Tang (ytang100@syr.edu)
  - Office: CST 4-193
  - Office hour: Monday 6:30pm-7:00pm (after class)
- TA: Reyhaneh Abdolazimi (rabdolaz@syr.edu)
  - Location: CST 0-125
  - Office hour: Thursday 1:30-3:30pm

Texts

- Lecture notes
- Textbook (Optional):
  - "Computer Systems: A Programmer's Perspective," Randal E. Bryant and David R. O'Hallaron
- Online materials (Tentative):
  - Bash Guide for Beginners: [tldp.org/LDP/Bash-Beginners-Guide/html]
  - Advanced Bash-Scripting Guide: [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]

Learning Objectives

The learning objective of this course is to teach about the systems-programming skills in the Unix environment, which include bash scripting, using tools in shell terminals, C++ programming, using GDB, assembly, etc.

Prerequisites

- ECS102 or an equivalent programming course

Grading

- Class exercises (30%), Homework (40%), Final exam (30%)

Schedule (Tentative)

Being comfortable in the Unix programming environment:

1. Setting up Linux
2. Bash programming and vim
3. Basic C/C++ programming
4. Assembly programming
5. Gcc, makefile, and gdb
6. Concept of syscalls