



# Randolph Y. Liang

randy8@vt.edu — (571) 296-6786 — [github.com/randy8](https://github.com/randy8)

**EDUCATION**     **Virginia Tech**     Aug 2014 — Dec 2018  
B.S. in **Computer Science** — Minor in Mathematics  
**GPA: 3.14**

Relevant Coursework: Data Structures and Algorithms, Computer Systems, iOS Mobile Software Development, Cryptography (Symmetric)

**EMPLOYMENT**   **Leidos, Inc.** — *Software Engineer Co-Op Intern*     May 2017 — Dec 2017

- Learned branching strategies (Git) and team-specific conventions.
- Spearheaded the development of a mis-attributable network using Vagrant to automatically setup/deploy VM nodes, developed a configuration server in C#, and integrated a multilingual XMPP Android chat client.
- Developed a Python GUI using TKinter that dumps user input into a JSON file and feeds it to Scrappy spiders to obtain OSM map data from online sources.

**PROJECTS**     **Extensible Shell** — *C*  
Process management for various UNIX commands, job control, and plugin support. Takes line-by-line input from the command line.

**Memory Manager** — *Java*  
Memory management package for storing records of songs/artists from a million-song database that uses a hash table to store handles. Implemented a range query using a 2-3+ tree to retrieve songs written by specific artists.

**randyliang.com** — *HTML/CSS, JavaScript*  
Personal website with miscellaneous information such as résumé, project, etc.

**Lyric Bot** — *Python*  
Twitter bot that scrapes lyrics from the web and tweets them every 30 minutes.

**Custom Chipotle Order** — *XML, Java*  
Android application that relies on user input to determine cost and nutrition for a Chipotle order using local prices/tax rates.

**SKILLS**     **Proficient:**    Java, Python, Git, GNU/Linux (Ubuntu), macOS  
**Familiar:**     C, C++, Swift, Ruby on Rails,  $\LaTeX$ , Eclipse Wireshark