

# Stephen Robicheaux

www.stephenrobicheaux.com

stephenrobic@gmail.com

832.359.8053

## EDUCATION

### SAM HOUSTON STATE UNIVERSITY

#### B.S. MATHEMATICS

May 2018 | Huntsville, TX

Minor in Computing Science

College of Science and Engineering Tech

Major GPA: 3.39 / 4.0

Minor GPA: 3.25 / 4.0

## LINKS

Github: [github.com/stephenrobic](https://github.com/stephenrobic)

LinkedIn: [linkedin.com/in/stephenrobicheaux](https://www.linkedin.com/in/stephenrobicheaux)

Twitter: [twitter.com/sarob\\_13](https://twitter.com/sarob_13)

## COURSEWORK

### UNDERGRADUATE

- Prog Fundamentals I & II (in Java)
- Computer Org. & Machine Language
- Introduction to Python
- Computer Architecture
- Database Management Systems
- Data Structures and Algorithms
- Linear Algebra and Matrices
- Algebraic Structures
- Theory/App of Prob. & Statistics I & II
- Introduction to Physics I & II

## SKILLS

### PROGRAMMING

Over 5000 lines:

Python • Java • Ada •  $\text{\LaTeX}$

Over 1000 lines:

Assembly

Familiar:

CSS • HTML • Javascript

Other:

Git • Windows • MySQL

Visual Studio • Visual Studio Code

Unity • Sage Math • NetBeans

GNAT Programming Studio

nasm • DosBox

## PROJECTS

### SIMPLE COMPUTER EMULATOR | COMPUTER ARCHITECTURE

Spring 2018 | <https://github.com/stephenrobic/SimpleCompEmulator>

- Created an emulator for a simple computer which operates on 16-bit integers using Python. I used the binascii module for hexadecimal conversion and the sys module to open the input file as a command line argument.
- The program reads a binary file containing 16 bit instructions words into an instruction list, and using direct addressing, from each word, it extracts certain bits and translates the word into one of 15 assembly language instructions.
- With 8 bits of each word being used in the memory address representation, this program directly addresses only 256 memory locations. It also makes use of a program counter and accumulator. For future implementation, bits are also extracted for an index flag, indirect flag, and a single opcode extension bit.

### TARGET PRACTICE | INTRO TO PYTHON

Fall 2017 | <https://github.com/stephenrobic/PythonTargetPractice>

- Created a 2-dimensional game in Python utilizing Turtle Graphics, Tkinter for menu GUI, and the Random module.
- The game utilizes the Cartesian plane, as the user aims for randomly appearing targets by inputting estimated speed/distance and the angle at which the targets appear.
- Seeks to help familiarize kids with distance and quick perception of angles (in degrees).

## RESEARCH

### GRAPH THEORY | UNDERGRADUATE RESEARCH

Fall 2017 | Huntsville, TX

Worked towards finding a disproof of the Graph Reconstruction Conjecture, to further test its validity. The Graph Reconstruction Conjecture says that a given original graph can be reconstructed from its list of single-vertex deleted subgraphs, using various techniques.

## HONORS & DISTINCTIONS

2013	Lifetime	National Society of Collegiate Scholars
2017	Spring	President's Honor Roll (4.0 Semester GPA)
2017	Fall	President's Honor Roll (4.0 Semester GPA)
2018	Spring	Dean's List

## REFERENCES AVAILABLE UPON REQUEST