

# Stephen Robicheaux



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## EDUCATION

### **SAM HOUSTON STATE UNIVERSITY**

**B.S. MATHEMATICS**

**MINOR IN COMPUTER SCIENCE**

College of Science and Engineering Tech

Grad: May 2018 | Huntsville, TX

## LINKS

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

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

## COURSEWORK

- 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
- Calculus I, II, & III

## SKILLS

### **PROGRAMMING**

Over 3000 lines:

Python • Java • Ada • Erlang • LaTeX

Over 1000 lines:

Assembly

Familiar:

CSS • HTML • Javascript

Other Used:

Git • Windows • MySQL

Visual Studio • Visual Studio Code

Unity • Sage Math • NetBeans

GNAT Programming Studio

nasm • DosBox • Kibana

Jenkins • DynamoDB

Auth0 • RabbitMQ • AWS

Datadog • Zendesk • Django

## WORK

### **ASSOCIATE SOFTWARE ENGINEER**

Alert Logic | November 2018- October 2019

- Developed highly available, fault tolerant and cloud based micro-services using OTP Erlang for the Platform Services team; responsible for testing, production/integration releases with Jenkins, and monitoring.
- Updated multiple services to use the newly released on-demand (Pay-Per-Request) DynamoDB tables, saving the company monetarily from integration, production, and private development stacks.
- Added and modified Datadog metrics and monitors to more accurately monitor the team's graphs and the company's software assets.
- Ameliorated broken endpoints that caused 4xx- 5xx errors as customers migrated from our legacy system, granting backwards compatibility.
- Helped manage Auth0 clients, adding callbacks for both our company services and customers and allowing Single Sign On for Zendesk clients.

## PROJECTS

### **SHOPPING LIST ORGANIZER | PYTHON DJANGO**

<https://github.com/stephenrobic/shopping-organizer>

- Created a web app used to manage and store recipes and lists (shopping, to-do, etc.).
- Utilizes Python, Django, PostgreSQL, and Docker/ Docker-compose.

### **SIMPLE COMPUTER EMULATOR | PYTHON**

<https://github.com/stephenrobic/SimpleCompEmulator>

- Reads 16-bit words sequentially from a binary file, converting certain bits of each word, respectively, into assembly language instruction opcodes, memory addresses, and flag register bits.
- This was tested by creating a binary file consisting of instructions for a division calculator.

## OPEN SOURCE

### **FAIRLEARN**

<https://github.com/fairlearn/fairlearn/pull/812>

- Fairlearn seeks to help data scientists improve fairness of AI systems.
- Implemented the 'count' metric, in order to decipher the exact number of data points per 'metric group' for analysis.

## RESEARCH

### **GRAPH THEORY | SAM HOUSTON STATE UNIVERSITY**

Worked towards finding a disproof of the Graph Reconstruction

Conjecture, to further test its validity. The Conjecture states that any given original graph can be reconstructed from its list of single-vertex deleted sub-graphs.

## MOST RECENT HONORS & DISTINCTIONS

2017 Spring President's Honor Roll (4.0 GPA)

2017 Fall President's Honor Roll (4.0 GPA)

2018 Spring Dean's List (3.5+ GPA)