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
Major GPA: 3.39 / 4.0
Minor GPA: 3.25 / 4.0

LINKS

github.com/stephenrobic
linkedin.com/in/stephenrobicheaux

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
- Calculus I, II, & III

SKILLS

PROGRAMMING

Over 3000 lines:
Python • Java • Ada • Erlang • 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 • Kibana
Jenkins • DynamoDB
Auth0 • RabbitMQ • AWS
Datadog • Zendesk

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.
- Assisted daily with inter-service permissions and dependency linkage for other development teams.
- Updated multiple services to use the newly released on-demand (Pay-Per-Request) DynamoDB tables, saving the company over $5,000 per month in our integration, production, and private development stacks.
- Updated the supervision tree (one-for-all strategy) of our assets management services, patching bugs that caused our gen_server to lose the state of all user accounts, along with other edge cases.
- 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 our Auth0 clients, by adding callbacks for both our company services and customers, which allowed Single Sign On between different consoles and Zendesk.

PROJECTS

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.

TARGET PRACTICE GAME | Python

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 is set in the Cartesian plane, as the user aims for randomly appearing targets by inputting an estimated distance and angle.

RESEARCH

GRAPH THEORY | Undergraduate Research

Fall 2017 | Sam Houston State University

Worked towards finding a disproof of the Graph Reconstruction Conjecture, to further test its validity. The Conjecture states that a given original graph can be reconstructed from its list of single-vertex deleted sub-graphs.

HONORS & DISTINCTIONS

2013	Lifetime	National Society of Collegiate Scholars
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)