JACK ROPER

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Enrolled in UT Austin Computer Science (3.84 GPA) , "Turing" Honors Program

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PERSONAL PROJECTS

Web Crawler and Search Engine (Java)   2018
- Crawled websites and indexed important data about sites in order to implement a custom search and similarity search engine
- Learned to manage very large amounts of data, and to optimize large programs

Computer Algebra System (Java)   2016-17
- A system to solving equations by saving them as symbol trees and then manipulating them to solve equations symbolically and without losing any precision to rounding error. Capable of solving and simplifying complex equations.
- Learned how to create and manage a large project, and how to properly test code.

Mafia App (iOS/Swift)   July 2016
- Prototype of Mafia game made over 3-week summer boot camp at Northwestern University. Used peer-to-peer Bluetooth to communicate between phones and run multiplayer game.
- Learned how not to run peer-to-peer systems.

Drawing Game (Javascript/WebGL)   2015-16
- A small web-based game in which you draw units and buildings onto the board and attempt to achieve a victory by destroying the enemy's buildings. Decided to program game engine from scratch.
- Learned proper programming and some optimization practices.

AWARDS AND CERTIFICATIONS

Best Student Created Project: Rose-Hulman Institute of Technology's "Operation Catapult"   2017
- "Best Project" award out of 40+ projects with 4-man teams after a 3-week engineering competition. Programmed microcontrollers for project.

AWS Certified Developer Associate: February 2019
- Certified as proficient developer of AWS services and technologies
- Validate at aws.amazon.com/verification with validation code GHEJCW22L2Q4QGK3

ACTIVITIES

CU STEAM Crew   2016-2017
- Teacher's assistant in programming classes for students K-8 at CU Boulder. In charge of mentoring kids better understand programming concepts taught in classes.

Information Systems Security Society   2018+
- Member of ISSS Club at UT Austin. Participated in all bi-weekly cybersecurity competitions and attended cybersecurity talks and lectures

EDUCATION

Previous Coursework: Honors Discrete Math, Honors Data Structures, Prob. and Statistics

Current Coursework: Honors Systems and Architecture, Honors Linear Algebra

SKILLS

Proficient In: Java, Kotlin

Exposure To: C, C++, Python, JS, Swift

Technologies Used: Git/Github, Command Line, TTD, AWS

Interests: Fantasy and Sci-Fi Books and Comics, Baking, Dungeons and Dragons